Oil, Paint and Drug Reporter

VOL. LXIV. No. 3. NEW YORK, MONDAY, JULY 20, 1903. FOR RATES SEE PAGE 7.

LEHN & FINK, New York

OFFER:

INSECT POWDER, Dalmatian
QUINCE SEED, German
IRISH MOSS, Bleached
GUM MYRRH
GUM KINO
VENICE TURPENTINE, Imported

Chas. Cooper & Co. 194 Worth St., New York. CHEMISTS,

EXTRA REFINED WOOD ALCOHOL, ETHER SULPHURIC, SOLUBLE COTTON AND ITS SOLVENTS.

SEND FOR PRICE LIST.

BARYTES

Nulsen, Klein & Krausse Manf'g Co.,

Successors to

DINGEE WEINMAN & CO.,

General Office, Sidney Street Factory, ST. LOUIS, MO.

JAMES H. DAVIDSON, 239 Front St., New York Agent.

WM. H. OSBORNE, 162 N. 4th St, Philadelphia Agent.

Wood Products Co.

(Formerly MANHATTAN SPIRIT CO.)

BUFFALO, N. Y.,

MANUFACTURERS OF

Refined Wood Alcohol

AND SOLE MANUFACTURERS OF

Columbian Spirit.

PRICE LIST:

Extra Refined 95% - 65c. Per Gallon.
Special Refined 97% - 70c. " "
COLUMBIAN SPIRIT (A pure methyl alcohol.) 1.50 " "

AGENTS:

WILLIAM S. GRAY.....76 William St., New York City.
PIERCE & STEVENS.....Buffalo, N. Y.
H. C. COLLIER & SONS.....Binghamton, N. Y.
MERRIMAC CHEMICAL CO. 75 and 77 Broad St., Boston, Mass.
MARTIN THAYER.....50 Central St., Boston, Mass.
M. L. BARRETT & CO.....219 Lake St., Chicago, Ill.
F. W. THURSTON & CO.....29 River St., Chicago, Ill.
PAUL A. DAVIS, JR.....136 N. Water St., Philadelphia, Pa.
A. L. WEBB & SONS.....Baltimore, Md.
C. B. LYON & BRO.....St. Paul, Minn.
ABNER HOOD.....Kansas City, Mo.
RICHARDSON DRUG CO.....Omaha, Neb.
W. A. HOVER & CO.....Denver, Colo.
THE BEHRENS DRUG CO....Waco and Houston, Tex.
W. P. FULLER & CO.....San Francisco, Cal.
F. W. BRAUN & CO.....Los Angeles, Cal.

ALCOHOL / LINSEED OIL

ESTABLISHED 1853
A. L. Webb & Sons
Pratt and Commerce Sts.,
BALTIMORE, MD.

Cologne Spirit / TURPENTINE, ROSIN, Etc.

GRAPHITE

From Mine or Factory
Dry, Paste, Liquid.
MICHIGAN PAINT COMPANY, Flint, Michigan.

SETAB REMOVER

Works perfectly on Paint, Varnish, Japan, Enamel. Tests better than all others. Prices to Paint Factories LOWEST EVER.
YOUR OWN LABEL.

GEO. H. LEONARD & CO., BOSTON,

IMPORTERS AND REFINERS

Cod, Menhaden, Cod Liver & Olive Oils,
WHITE FISH OIL, DEGRAS, PALMETTO, OAK, QUEBRACHO and HEMLOCK EXTRACTS.

UNION PETROLEUM COMPANY,

REFINERS OF AND DEALERS IN

Lubricating and Illuminating Oils, Petrolatum, Gas and Fuel Oils.

Exporters of every product of Petroleum. Facilities for shipping bulk cargoes of Illuminating and Gas Oils.

Offices, 135 S. Second Street,
PHILADELPHIA, U. S. A.

INSULATING....

COMPOUND

BLACK, BRILLIANT and ELASTIC.

Also WAXES of all kinds

W. H. BOWDLEAR & CO., 149 Pearl St., Boston, Mass.

Factories at Williamsville, Mass.

Chlorate of Potash

AMERICAN MAKE

DILLON & CO., 20 Cedar Street, New York City.

THE CHARLES E. HIRES COMPANY,

Importers and Exporters of VANILLA BEANS

Tonqua Beans and Vanillin.

BRANCH OFFICES: PHILADELPHIA, 105 South Water Street.
NEW YORK, BOSTON, CHICAGO, SAN FRANCISCO

WEBB'S ALCOHOL,

THE ACKNOWLEDGED STANDARD

JAMES A. WEBB & SON, 165 Pearl Street, NEW YORK.

The S. P. Wetherill Company

MANUFACTURERS OF

COPPERAS

IN CAR LOADS OR LESS, BARRELS OR BULK

100 William St., NEW YORK. 925 Chestnut St., PHILADELPHIA

WATERS PIERCE OIL CO.

Refiners of **PETROLEUM**

MANUFACTURERS OF **CAR and AXLE GREASE**

PRINCIPAL OFFICE:
816 OLIVE ST., Odd Fellows' Building,
ST. LOUIS, MO., U. S. A.

Depots in all Towns in the
SOUTHWEST and OLD MEXICO

BORNE, SCRYMSER COMPANY,

REFINERS OF

HIGH-GRADE PETROLEUM
...LUBRICANTS...

CYLINDER OILS

Engine Oils, Machinery Oils, Railroad Engine and Car Oils, Spindle Oils, Wool Oils, 300° Fire-Test Burning Oils, Neutral Oils, Lubricating Greases, Paraffine Wax.

WORKS, ELIZABETHPORT, N. J.

OFFICES:

80 and 81 South Street, New York.
3 Adelaide Place, London Bridge, London, Eng.
18 St. Ann Street, Manchester, Eng.
57 West Nile St., Glasgow, Scotland.
4 Rue Chauchat, Paris, France.
52 Dovenhof, Hamburg, Germany.

STANDARD OIL CO., Boston Dept.

SELL THE FINEST GRADE OF

Stove Naphtha for **VAPOR STOVES**

The disagreeable features connected with cooking are done away with by the use of a VAPOR STOVE.
There is no kindling to prepare, no ashes to remove and no waiting for sufficient heat.
Its full power is instantly developed and ceases at your touch.
Its first cost is in itself attractive.
Its fuel cost is less than *ONE-HALF CENT per HOUR.*

GALENA-SIGNAL OIL COMPANY

Successors to Galena Oil Company, and Signal Oil Company

FRANKLIN, PA.

SOLE MANUFACTURERS OF THE CELEBRATED

GALENA COACH, ENGINE and CAR OILS

AND

Sibley's Perfection Valve and Signal Oils

CHARLES MILLER, President.

STANDARD OIL CO., OF NEW YORK

Cable Address, "Regent, New York."

THOMPSON & BEDFORD DEPARTMENT,

26 BROADWAY, - - - - - - NEW YORK, U. S. A.

19 St. Ann Street, Manchester, Eng.
Bismarckstrasse 15, Frankfort A/M, Germany.
Puerto del Angel, Barcelona, Spain.
31 Hornby Road, Bombay, India
Billiter Buildings, 22 Billiter Street, London, E. C., Eng.
25 Boulevard Haussman, Paris, France.
Collins and Williams Streets, Melbourne, Australia.
8 Dalhousie Sq., East, Calcutta, India.

BEST PETROLEUM LUBRICANTS

OF GREAT BODY OR VISCOSITY AND HIGH FLASH.

PALE SPINDLE, MACHINERY AND ENGINE OILS, BAYONNE ENGINE OILS, RAILROAD ENGINE AND CAR OILS, 300° MINERAL COLZA OIL,

In exclusive use by the English Admiralty.....

CYLINDER OILS, LUBRICATING GREASES, PARAFFINE SCALE AND WAX

WORKS: FRANKLIN, PHILADELPHIA, OIL CITY, PITTSBURGH, PA.: CLEVELAND, O.; BAYONNE, CLAREMONT, N. J.; HUNTER'S POINT, BUFFALO, N. Y.; PARKERSBURG, W. VA.

Directory for Buyers.

This list is intended to assist buyers in quickly ascertaining who are headquarters for everything in the Chemical, Drug, Oil, Paint, Dyestuffs, Fertilizers, Naval Stores and allied trades, also Machinery manufacturers. The names given in this list are those of representative concerns, and it is respectfully requested, when communicating with any of them, that the fact that the name was taken from this list be mentioned. For Machinery advertisements see page 23.

ACETANILID.

C. Bischoff & Co., 88 Park Place, New York.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
R. W. Phair, 16 Platt St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

ACETATE OF ALUMINA.

F. Bredt & Co., 194 Fulton St., New York.
Merrimac Chem. Co., 75-77 Broad St., Boston.
The Selling Co., 186 Front St., New York.

ACETATE OF LEAD.

F. Bredt & Co., 194 Fulton St., New York.
Cochrane Chemical Co., 55 Kilby St., Boston.
Thomsen Chemical Co., Baltimore, Md.

ACETATE OF SODA.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland & New York.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 186 Front St., New York.

ACETIC ACID.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fuerst Bros. & Co., 2 Stone St., New York.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland & New York.
Harrison Bros. & Co., Inc., Philadelphia.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 186 Front St., New York.
Thomsen Chemical Co., Baltimore, Md.

ALIZARINE COLORS.

Berlin Aniline Works, 213 Water St., N. Y.
Brunner, Mond & Co., Ltd., Northwish, Eng.
Cassela Color Co., 182 Front St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Arnold, Hoffman & Co., Inc., Providence.
H. A. Metz & Co., 122 Hudson St., New York.

ALKALI.

American Chemical Co., Cincinnati, O.
Fuerst Bros. & Co., 2 Stone St., New York.
Hollingsworth & Peterson, 653 Bourse, Phila.
Linder & Meyer, 89 State St., Boston.
The Selling Co., 186 Front St., New York.
Solvay Process Co., Syracuse & New York.
Thomsen Chemical Co., Baltimore, Md.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, Ohio.

ALUM.

Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Harrison Bros. & Co., Inc., Philadelphia.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
The Selling Co., 186 Front St., New York.
Thomsen Chemical Co., Baltimore, Md.

ALUMINA.

Cochrane Chemical Co., 55 Kilby St., Boston.
General Chem. Co., 25 Broad St., New York.
Harrison Bros. & Co., Inc., Philadelphia.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

AMYL ACETATE.

Albany Chemical Co., Albany, N. Y.
Chas. Cooper & Co., 194 Worth St., New York.
Maas & Waldstein, 107 Murray St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

AMMONIA NITRATE, PURE ANI COM'L.

Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.

ANILINES.

Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
C. Bischoff & Co., 88 Park Place, New York.
F. Bredt & Co., 194 Fulton St., New York.
Cassela Color Co., 182 Front St., New York.
Heller & Merz Co., 22 Cliff St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kutroff, Pickhardt & Co., 128 Duane St., N. Y.
H. A. Metz & Co., 122 Hudson St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

AQUA AMMONIA.

Billings-Clapp Co., Boston.
Cochrane Chemical Co., 55 Kilby St., Boston
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland & New York.
Harrison Bros. & Co., Inc., Philadelphia.
Heller, Hirsh & Co., 62 William St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Powers & Weightman, Philadelphia.
Thomsen Chemical Co., Baltimore, Md.
John C. Wiarda & Co., Brooklyn, N. Y.

ARSENIC.

Binney & Smith Co., 81 Fulton St., New York.
C. Bischoff & Co., 88 Park Place, New York.
Fuerst Bros. & Co., 2 Stone St., New York.
Harshaw, Fuller & Goodwin Co., Cleveland, O.
Edw. Hill's Sons & Co., 71 Pine St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
McKesson & Robbins, 91 Fulton St., N. Y.
H. A. Metz & Co., 122 Hudson St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
John C. Wiarda & Co., Brooklyn, N. Y.
Isaac Winkler & Bro., Cincinnati, Ohio.

ASPHALTUM.

John S. Lamson & Bro., 77 Maiden Lane, N. Y.
Melchior, Armstrong & Dessau, 32 Broadway.

BARYTES.

Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, Eng.
Bristol Barytes Mills, 27 William St., N. Y.
Fuerst Bros. & Co., 2 Stone St., New York.
Gabriel & Schall, 205 Pearl St., New York.
Nulsen Klein & Krausse Mfg. Co., St. Louis.

BEESWAX.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
W. H. Bowdlear & Co., Boston, Mass.
Smith & Nichols, 145 Front St., New York.

BENZOLS AND COAL TAR NAPHTHAS.

Barrett Mfg. Co., Land Title Bldg., Phila.

BI-CARB. SODA.

American Chemical Co., Cincinnati, O.
Church & Dwight Co., 64-65 Wall St., N. Y.
Diamond Soda Works, Milwaukee, Wis.
Edw. Hill's Sons & Co., 71 Pine St., N. Y.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
Thomsen Chemical Co., Baltimore, Md.

BICHROMATE OF POTASH.

Fergusson Bros., Philadelphia.
Powers & Weightman, Philadelphia.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 186 Front St., New York.

BIRD SEED.

Albert Dickinson Co., Chicago.

BISULPHIDE OF CARBON.

Billings-Clapp Co., Boston.
Chas. Cooper & Co., 194 Worth St., New York.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
Powers & Weightman, Philadelphia.
E. R. Taylor, Penn Yan, N. Y.
J. H. Wheeler & Co., 567 Smith St., Brooklyn, N. Y.

BISULPHIDE OF SODA.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chemical Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Kutroff, Pickardt & Co., 128 Duane St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
The Selling Co., 186 Front St., New York.

BLEACHING POWDER.

Acker Process Co., Niagara Falls, N. Y.
American Chemical Co., Cincinnati, O.
Arnold, Hoffman & Co., Inc., Providence.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
The Dow Chemical Co., Midland, Mich.
Fergusson Bros., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
Edw. Hill's Sons & Co., 71 Pine St., N. Y.
Hollingsworth & Peterson, Philadelphia.
A. Klipstein & Co., 122 Pearl St., New York.
James Lee & Co., 76 William St., New York.
Linder & Meyer, 89 State St., Boston.
J. L. & D. S. Riker, 46 Cedar St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Thomsen Chemical Co., Baltimore, Md.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, Ohio.

BLUE VITRIOL.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fergusson Bros., Philadelphia.
General Chemical Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Hoopie & Androvette, 218 Fulton St., N. Y.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
The Selling Co., 186 Front St., New York.

BONE BLACK.

Binney & Smith Co., 81 Fulton St., New York.
Lister's Agri. Chem. Wks., 26 B'way, N. Y.
Michigan Carbon Works, Detroit, Mich.
Seaver & Co., 120 Milk St., Boston.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

BORACIC ACID.

Pacific Coast Borax Co., 100 William St., N. Y.
Chas. Pfizer & Co., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.

BORAX.

Pacific Coast Borax Co., 100 William St., N. Y.
Chas. Pfizer & Co., New York.
John C. Wiarda & Co., Brooklyn, N. Y.

CALCIUM CHLORIDE.

Carbondale Chemical Co., Carbondale, Pa.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Wing & Evans, 22 William St., New York.

CAMPHOR.

American Camphor Refining Co., 14 Fulton St., Boston, and 5 Platt St., New York.
H. J. Baker & Bro., 100 William St., N. Y.
Chas. Pfizer & Co., New York.
W. F. Simes & Son, 921 Real Estate Trust Bldg., Philadelphia, Pa.

CARBOLIC ACID.

Barrett Mfg. Co., Philadelphia.
Billings-Clapp Co., Boston.
Fuerst Bros. & Co., 2 Stone St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, New York.
Merck & Co., New York.
Powers & Weightman, Philadelphia.
Schieffelin & Co., 172 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
White Tar Co., 101 N. Moore St., New York.

CARBONATE OF AMMONIA.

Fuerst Bros. & Co., 2 Stone St., New York.
Michigan Carbon Works, Detroit.

CARBONATE OF POTASH.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fergusson Bros., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
Edw. Hill's Sons & Co., 71 Pine St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
James Lee & Co., 76 William St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.
Isaac Winkler & Bro., Cincinnati, O.

CARBON BLACK.

Binney & Smith Co., 81 Fulton St., New York.
Godfrey L. Cabot, 100 Broad St., Boston, Mass.
Seaver & Co., 120 Milk St., Boston.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

CASCARA.

S. Heitshu & Co., 65 Front St., Portland, Ore.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, New York.

CASTOR OIL.

H. J. Baker & Bro., 100 William St., N. Y.
Fuerst Bros. & Co., 2 Stone St., New York.
National Lead Co., 100 William St., New York.

CAUSTIC SODA.

Acker Process Co., Niagara Falls, N. Y.
American Chemical Co., Cincinnati, O.
Arnold, Hoffman & Co., Inc., Providence.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fergusson Bros., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
General Chemical Co., 25 Broad St., New York.
Edw. Hill's Sons & Co., 71 Pine St., N. Y.
Hollingsworth & Peterson, 653 Bourse, Phila.
A. Klipstein & Co., 122 Pearl St., New York.
James Lee & Co., 76 William St., New York.
Linder & Meyer, 89 State St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Thomsen Chemical Co., Baltimore, Md.
Welch & Welch, 121 Broad St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, Ohio.

CHALK.

Charles Earl Currie & Co., Louisville, Ky.

CHEMISTS—EXPERT.

Dr. Peter T. Austen, 89 Pine St., New York.
Carlton Ellis, 7 Water St., Boston, Mass.

CHINA CLAY.

Fuerst Bros. & Co., 2 Stone St., New York.
Philadelphia Clay Mfg. Co., 766 Drexel Bldg., Philadelphia.
John C. Wiarda & Co., Brooklyn, N. Y.

CHLORATE OF POTASH.

Dillon & Co., 20 Cedar St., New York.
Fergusson Bros., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Linder & Meyer, 89 State St., Boston.
R. W. Phair, 16 Platt St., New York.
J. L. & D. S. Riker, 46 Cedar St., New York.
Roessler & Hasslacher Chem. Co., 100 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

CHLORATE OF SODA.

Fuerst Bros. & Co., 2 Stone St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
J. L. & D. S. Riker, 46 Cedar St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

CHLORIDE OF ZINC.

Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
Fuerst Bros. & Co., 2 Stone St., New York.
General Chemical Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Roessler & Hasslacher Chem. Co., 100 William St., New York.

CHLOROFORM.

Albany Chemical Co., Albany, N. Y.
Billings-Clapp Co., Boston.
Mallinckrodt Chemical Works, St. Louis, Mo.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, Philadelphia.
Roessler & Hasslacher Chem. Co., 100 William St., New York.

COAL TAR OILS.

Barrett Mfg. Co., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

COAL TAR PRODUCTS.

Barrett Mfg. Co., Philadelphia.
Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
C. Bischoff & Co., 88 Park Place, N. Y.
F. Bredt & Co., 194 Fulton St., New York.
Fuerst Bros. & Co., 2 Stone St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
H. A. Metz & Co., 122 Hudson St., New York.
Roessler & Hasslacher Chem. Co., 100 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
The Selling Co., 186 Front St., New York.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

COCAINE.

C. Bischoff & Co., 88 Park Place, N. Y.
Mallinckrodt Chemical Works, St. Louis, Mo.
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
R. W. Phair, 16 Platt St., New York.
Powers & Weightman, Philadelphia.
Roessler & Hasslacher Chem. Co., 100 William St., New York.
Schieffelin & Co., 172 William St., New York.

COCOANUT OIL.

Fuerst Bros. & Co., 2 Stone St., New York.
Edw. Hill's Sons & Co., 71 Pine St., N. Y.
James Lee & Co., 76 William St., New York.
Paterson, Boardman & Co., 133 Front St., N.Y.
Welch & Welch, 121 Broad St., New York.
Isaac Winkler & Co., Cincinnati, O.

CODLIVER OIL.

A. W. Ladd & Co., Gloncester, Mass.
Isdahl & Co., Bergen, Norway.
Otto S. Jervell, Aalesund, Norway.
Lehn & Fink, 120 William St., New York.
Geo. H. Leonard & Co., Boston.
G. B. Martin, 98 William St., New York.
McKesson & Robbins, New York.
Schieffelin & Co., 172 William St., New York.

COLD WATER PAINT.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Columbia Refining Co., 32 B'way, New York.
Muralo Co., New Brighton, S. I., N. Y.

COLOR CARDS.

Kinsey & Johnston, Cincinnati, Ohio.

COPPERAS.

American Steel & Wire Co., Chicago & N. Y.
General Chemical Co., 25 Broad St., New York.
Harshaw, Fuller & Goodwin Co., Cleveland and New York.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
S. P. Wetherill Co., New York & Philadelphia.
C. K. Williams & Co., Easton, Pa.

CORN OIL.

Elbert & Gardner, Produce Exchange, N. Y.
Welch & Welch, 121 Broad St., New York.

COTTONSEED OIL.

American Cotton Oil Co., 27 Beaver St., N. Y.
J. R. C. Boyer, Memphis, Tenn.
Elbert & Gardner, Produce Exchange, N. Y.
Florida Cotton Oil Co., Jacksonville, Fla.
Fuerst Bros. & Co., 2 Stone St., New York.
Globe Refinery Co., Louisville, Ky.
Kentucky Refining Co., Louisville, Ky.
Louisville Cotton Oil Co., Louisville, Ky.
Procter & Gamble Co., Cincinnati, Ohio.
Seaboard Refining Co., New Orleans, La.
Southern Cotton Oil Co., 11 Broadway, N. Y.
Trinity Cotton Oil Co., Dallas, Tex.
Welch & Welch, 121 Broad St., New York.

CREAM TARTAR.

Chas. Pfizer & Co., New York.
Tartar Chemical Co., 92 William St., N. Y.

CRUDE DRUGS.

Dodge & Olcott, 86 William St., New York.
J. L. Hopkins & Co., 100 William St., N. Y.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, 91 Fulton St., N. Y.
Parke, Davis & Co., Detroit, Mich., and 92 Maiden Lane, N. Y.
Schieffelin & Co., New York.
Thurston & Braidich, 128 William St., N. Y.

DEGRAS.

Fuerst Bros. & Co., 2 Stone St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Geo. H. Leonard & Co., Boston.
Benj. R. Vickers & Sons, Leeds, England.

DOUBLE MANURE SALT.

German Kali Works, 93 Nassau St., N. Y.
Hamilton H. Salmon & Co., 88 Wall St., N. Y.

DRUG MILLERS.

J. L. Hopkins & Co., 100 William St., N. Y.

DRY COLORS.

American Steel & Wire Co., New York.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, England.
Cawley, Clark & Co., Newark, N. J.
Fuerst Bros. & Co., 2 Stone St., New York.
Gabriel & Schall, 205 Pearl St., New York.
Harrison Bros. & Co., Inc., Philadelphia.
Morris Herrmann & Co., 68 William St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
Bruno Lampel, Cologne, Ehrenfeld-on-the-Rhine, Germany.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Schroeder & Stadelmann, Oberlahnstein, Germany.
Wm. F. Siemon & Co., 92 William St., N. Y.
A. W. Smith, Ltd., 79 Duane St., New York.
R. J. Waddell & Co., 52 Beekman St., N. Y.
The S. P. Wetherill Co., New York & Phila.
C. K. Williams & Co., Easton, Pa.

DYESTUFFS.

Arnold, Hoffman & Co., Providence, R. I.
F. E. Atteaux & Co., 174-176 Purchase St., Boston.
Berlin Aniline Works, 213 Water St., N. Y.
J. A. & W. Bird & Co., 88 Wall St., N. Y.
C. Bischoff & Co., 88 Park Place, New York.
F. Bredt & Co., 194 Fulton St., New York.
Cassela Color Co., 182 Front St., New York.
E. Fassbender & Co., Rotterdam, Holland.
Fuerst Bros. & Co., 2 Stone St., New York.
Hoopie & Androvette, 218 Fulton St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
John D. Lewis, 304 Exchange Pl., Providence.
H. A. Metz & Co., 122 Hudson St., New York.
Roger Schultz & Co., Trieste, Austria.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

DYEWOOD EXTRACTS.

A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
John D. Lewis, Providence, R. I.
Geo. H. Leonard & Co., Boston.
The Sharpless Dyewood Extract Co., 548-551 Bourse, Philadelphia.

ESSENTIAL OILS.

Berlin Aniline Works, 213 Water St., N. Y.
Antoine Chiris, 18-20 Platt St., New York.
F. A. Corlo, Messina, Sicily.
Dodge & Olcott, 86 William St., New York.
P. R. Dreyer, 68 Broad St., New York.
Fuerst Bros. & Co., 2 Stone St., New York.
D. W. Hutchinson, 5 Cedar St., New York.
Lehn & Fink, 120 William St., New York.
Magnus & Lauer, 92 Pearl St., New York.
McKesson & Robbins, 91 Fulton St., N. Y.
F. M. Rudd, Bronson, Mich.
Schieffelin & Co., 172 William St., New York.
Sozio & Androli, Grasse, France.
A. M. Todd, Kalamazoo, Mich.

ETHERS.

Billings-Clapp Co., Boston.
Chas. Cooper & Co., 194 Worth St., New York.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
Powers & Weightman, Philadelphia.

FERTILIZING MATERIALS.

Chilean Nitrate Works, 12 John St., N. Y.
Fuerst Bros. & Co., 2 Stone St., New York.
Lister's Agri. Chem. Works, 26 B'way, N. Y.
German Kali Works, 93 Nassau St., N. Y.
H. H. Salmon & Co., 88 Wall St., New York.

FLAX SEED.

Albert Dickinson Co., Chicago.

FORMALDEHYDE.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
C. Bischoff & Co., 87 Park place, New York.
Fries Bros., 92 Reade St., New York.
Fuerst Bros. & Co., 2 Stone St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Merck & Co., New York.
H. A. Metz & Co., 122 Hudson St., New York.
Roessler & Hasslacher Chem. Co., 100 William St., New York.

FULLER'S EARTH.

Fuerst Bros. & Co., 2 Stone St., New York.

FUSEL OIL.

Albany Chemical Co., Albany, N. Y.
Maas & Waldstein, 107 Murray St., New York
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

GELATINE.

Michigan Carbon Works, Detroit.

GLAUBER'S SALTS.

American Chemical Co., Cincinnati, O.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chemical Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Wm. F. Jobbins, Aurora, Ill.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Powers & Weightman, Philadelphia.
Thomsen Chemical Co., Baltimore, Md.
John C. Wiarda & Co., Brooklyn, N. Y.

GLUE.

Lister's Agri. Chem. Works, 26 B'way, N. Y.
Michigan Carbon Works, Detroit.
Rogers & Pyatt, 78 Maiden Lane, New York.

GLYCERINE.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Fuerst Bros. & Co., 2 Stone St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Harshaw, Fuller & Goodwin Co., Cleveland, O.
Wm. F. Jobbins, Aurora, Ill.
A. Klipstein & Co., 122 Pearl St., New York.
Procter & Gamble Co., Cincinnati, O.
Schrameck & Co., 1 Place Boieldieu, Paris.

GRAPHITE.

Joseph Dixon Crucible Co., Jersey City, N. J.
Michigan Paint Co., Flint, Mich.

GUMS.

Arnold, Hoffman & Co., Providence, R. I.
F. Bredt & Co., 194 Fulton St., New York.
Fuerst Bros. & Co., 2 Stone St., New York.
Hugo Hochberg, 256 Pearl St., City.
Herm. A. Hoistein, Constantinople, Turkey.
Alfred A. Keun & Co., Smyrna, Turkey.
Lehn & Fink, 120 William St., New York.
McKesson & Robbins, 91 Fulton St., N. Y.
Parke, Davis & Co., 90 Maiden Lane, N. Y.
Roger Schultz & Co., Trieste, Austria.
Schieffelin & Co., 172 William St., New York.
Thurston & Braidich, 128 William St., N. Y.

HYDROFLUORIC ACID.

General Chemical Co., 25 Broad St., New York.
Harshaw, Fuller & Goodwin Co., Cleveland, O.
John C. Wiarda & Co., Brooklyn, N. Y.

PURE ALKALI

Manufactured by the Ammonia Process by

BRUNNER, MOND & CO.

(LIMITED)

Northwich, England.

THIS ALKALI contains 58^{50} deg. Alkametrical Test and is the most economical form of soda known for the manufacture of Glass, Soap, Paper, Wood Pulp, Starch or Colors. And for cleaning Wool and Bleaching. In fact, for any purpose where soda in its purest form is required. Its Strength is Uniform and Quality Always the Same.

We are in constant receipt of this article, packed in casks and bags at the ports of

New York, Boston,

Philadelphia, Baltimore,

and New Orleans.

We are prepared to make contracts for forward delivery.

WING & EVANS,

22 William Street, . . New York.

SOLE AGENTS for the UNITED STATES.

HYPOSULPHITE OF SODA.

Cochrane Chemical Co., 55 Kilby St., Boston.
Grasselli Chemical Co., Cleveland and N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N. Y.
James Lee & Co., 76 William St., New York.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Roessler & Hasslacher Chem. Co., 100 William St., New York.
The Selling Co., 186 Front St., New York.
Thomsen Chemical Co., Baltimore, Md.

INDIGO.

Arnold, Hoffman & Co., Inc., Providence, R. I.
General Chem. Co., 25 Broad St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
H. A Metz & Co., 122 Hudson St., New York.
Taylor & Barker, Lowell, Mass.

INSURANCE BROKERS.

Chas. L. Wise & Co., 45 Cedar St., New York.

IVORY AND DROP BLACK.

Seaver & Co., 120 Milk St., Boston.

LAMP BLACK.

Bihn & Wolff Co., Bridesburg, Phila., Pa.
Binney & Smith Co., 81 Fulton St., New York.
Seaver & Co., 120 Milk St., Boston.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

LINSEED OIL.

American Linseed Co., 100 William St., N. Y.
Atlantic White Lead and Linseed Oil Co., 100 William St., New York.
National Lead Co, 100 William St., New York.
Spencer Kellogg, Buffalo, N. Y.
A. L. Webb & Sons, Baltimore, Md.

LITHOPONE.

Grasselli Chemical Co., Cleveland and N. Y.
Gabriel & Schall, 205 Pearl St., New York.
The HeHer & Mera Co., 22 Cliff St., N. Y.

MANGANESE.

George G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, England.
Harshaw, Fuller & Goodwin Co., Cleveland and New York.
Kendall & Flick, Washington, D. C.
A. Klipstein & Co., 122 Pearl St., New York.
Jno. S. Lamson & Bro., 77 Maiden Lane, N. Y.
James Lee & Co., 76 William St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.

MENHADEN OIL.

Geo. H. Leonard & Co., Boston.
W. A. Robinson & Co., New Bedford, Mass.
Frank L. Young & Kimball, New Bedford, Mass.

MORPHINE.

Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, Philadelphia.
Rosengarten & Sons, Philadelphia.
Zimmer & Co., Frankfort-on-Main, Germany.

MURIATIC ACID.

Cochrane Chemical Co., 55 Kilby St., Boston.
Chas. Cooper & Co., 194 Worth St., New York.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
Thomsen Chemical Co., Baltimore, Md.

MYRBANE.

Barrett Mfg. Co., Philadelphia.
Berlin Aniline Works, 72 Front St., New York.
The Selling Co., 186 Front St., New York.

NAPHTHA.

Barrett Mfg. Co., Philadelphia.
Crew Levick Company, Philadelphia.
Standard Oil Co., New York.
The Paragon Refining Co., Toledo, O.

NAPHTHALINE.

Barrett Mfg. Co., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.
White Tar Co., 101 N. Moore St., New York.

NITRATE OF SODA.

Battelle & Renwick, 163 Front St., New York.
Chilean Nitrate Works, 12 John St., New York.

NITRIC ACID.

Chas. Cooper & Co., 194 Worth St., New York.
Cochrane Chemical Co., 55 Kilby St., Boston.
General Chemical Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Harrison Bros. & Co., Inc., Philadelphia, Pa.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
Thomsen Chemical Co., Baltimore, Md.

OCHER.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Bruno Lampel, Cologne, Ehrenfeld-on-the-Rhine, Germany.
Schroeder & Stadelmann, Oberlahnstein, Germany.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
C. K. Williams & Co., Easton, Pa.

OIL OF VITRIOL (Sulphuric Acid).

Cochrane Chemical Co., 55 Kilby St., Boston.
Chas. Cooper & Co , 194 Worth St., New York.
General Chem. Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland and N. Y.
Harrison Bros. & Co., Inc., Philadelphia, Pa.
Kuttroff, Pickhardt & Co., 128 Duane St., N.Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Mineral Point Zinc Co., 1104 Marquette Bldg., Chicago, Ill.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Powers & Weightman, Philadelphia.
T. P. Shepard & Co., Providence, R. I.
Thomsen Chemical Co., Baltimore, Md.

OLIVE OIL.

F. Bredt & Co., 194 Fulton St., New York.
A. W. Dodd & Co., Gloucester, Mass.
Fuerst Bros. & Co., 2 Stone St., New York.
Lehn & Fink, 120 William St., New York.
Geo. H. Leonard & Co. Boston.
Schieffelin & Co., 172 William St., New York.
Welch & Welch, 121 Broad St., New York.

OPIUM.

Edw. Hill's Sons & Co., 71 Pine St., N. Y.
Herm. A. Holstein, Constantinople, Turkey.
Alfred A. Kuen & Co., Smyrna, Turkey.
A. Lavino & Co., Smyrna (Asia Minor).
Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, New York and Phila.
Rosengarten & Sons, Philadelphia.
Schieffelin & Co., 172 William St., New York.
Thurston & Braidich, 128 William St., N. Y.

OXIDE OF IRON.

W. F. Siemon & Co., 92 William St., N. Y.
C. K. Williams & Co., Easton, Pa.

OXIDE OF ZINC.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Gabriel & Schall, 205 Pearl St., New York.
New Jersey Zinc Co., 11 Broadway, New York.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
S. P. Wetherell Co., New York and Phila.

PALM OIL.

Elbert & Gardner, Produce Exchange, N. Y.
James Lee & Co., 76 William St., New York.
Welch & Welch, 121 Broad St., New York.

PAINTS.

Acme White Lead & Color Wks., Detroit, Mich.
Adams & Elting Co., Chicago, Ill.
American Steel & Wire Co., New York and Chicago.
Bridgeport Wood Finishing Co., 55 Fulton St., New York.
Samuel H. French & Co., Philadelphia.
Harrison Bros. & Co., Inc., Philadelphia.
John Lucas & Co., Philadelphia.
John W. Masury & Son, New York.
Mohawk Paint & Chemical Co., Norwich, Conn.
Benj. Moore & Co., Brooklyn, N. Y.
F. O. Pierce Co., 170 Fulton St., New York.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
U. S. Smelting Co., Canon City, Colo.
S. P. Wetherell Co., New York & Phila.
C. K. Williams & Co., Easton, Pa.

PARAFFINE OIL.

Manufacturers' Paraffine Co., Chester, Pa.
Standard Oil Co., New York.
Tidewater Oil Co., New York.

PARAFFINE WAX.

Crew Levick Co., Philadelphia.
Fuerst Bros. & Co., 2 Stone St., New York.
Manufacturers' Paraffine Co., Chester, Pa.
Smith & Nichols, 145-147 Front St., New York.
Standard Oil Co., 408 W. 14th St., New York.
Tidewater Oil Co., 12 Broadway, New York.

PETROLEUM.

Atlantic Refining Co., Franklin, Pa.
Borne, Scrymser Co., 80 South St., New York.
Crew, Levick Co., Philadelphia.
Standard Oil Co., New York.
The Paragon Refining Co., Toledo, O.
Union Petroleum Co., 135 S. 2d St. Phila.
Waters-Pierce Oil Co., 516 Olive St., St. Louis.

PHOSPHORUS.

General Chem. Co., 608 Bourse, Philadelphia.

PRUSSIATE OF POTASH.

Fuerst Bros. & Co., 2 Stone St., New York.
A. Klipstein & Co., 122 Pearl St., New York.
Kuttroff, Pickhardt & Co., 128 Duane St., New York.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.

PLUMBAGO.

Joseph Dixon Crucible Co., Jersey City, N. J.
Paterson, Boardman & Co., 133 Front St., New York.
Wegelin & Wilckes Black Mfg. Co., 50 Cliff St., New York.

PUTTY.

E. S. Belknap, McSherry & Moran, 286 Monroe St., New York.

QUININE.

Merck & Co., New York.
N. Y. Quinine & Chemical Works, 114 William St., New York.
R. W. Phair, 16 Platt St., New York.
Powers & Weightman, Philadelphia.
Roessler & Hasslacher Chemical Co., 100 William St., New York.
Rosengarten & Sons, Philadelphia, Pa.

ROSIN.

A. L. Webb & Sons, Baltimore, Md.

ROTTEN STONE.

Geo. G. Blackwell Sons & Co., Ltd., The Albany, Liverpool, England.
R. J. Waddell & Co., 52 Beekman St., N. Y.

SAL AMMONIAC.

J. A. & W. Bird & Co., 88 Wall St., N. Y.
Cochrane Chemical Co., 55 Kilby St., Boston.
Fuerst Bros. & Co., 2 Stone St., New York.
Grasselli Chemical Co., Cleveland & New York.
A. Klipstein & Co., 122 Pearl St., New York.
R. W. Phair, 16 Platt St., New York.
Roessler & Hasslacher Chemical Co., 100 William St., New York.

SAL SODA.

American Chemical Co., Cincinnati, O.
Church & Dwight Co., 63-65 Wall St., N. Y.
Diamond Soda Works, Milwaukee, Wis.
Fergusson Bros., Philadelphia.
Grasselli Chemical Co., Cleveland & New York.
Hollingsworth & Peterson, 653 Bourse, Phila.
James Lee & Co., 76 William St., New York.
Penna. Salt Mfg. Co., 115 Chestnut St., Phila.
Thomsen Chemical Co., Baltimore, Md.
Welch & Welch, 121 Broad St., New York.
John C. Wiarda & Co., Brooklyn, N. Y.
Wing & Evans, 22 William St., New York.

SALT CAKE.

General Chemical Co., 25 Broad St., New York.
Grasselli Chemical Co., Cleveland & New York.

SALTPETER.

Battelle & Renwick, 163 Front St., New York.

SEEDS.

Albert Dickinson Co., Chicago.
J. Fritzlin, Amsterdam.
Les Fils de F. Balladur, Smyrna (Asia Minor).
Planchon Ainee, Marseilles, France.
Roger Schultz & Co., Trieste, Austria.

SHELLAC.

Berry Bros., Ltd., Detroit, Mich.
Hoopie & Androvette, 218 Fulton St., N. Y.
New York Shellac Co., 229 Pearl St., N. Y.
Rogers & Pyatt, 78 Maiden Lane, New York.

SODA ASH.

American Chemical Co., Cincinnati, Ohio.
Arnold, Hoffman & Co., Providence.
Fuerst Bros. & Co., 2 Stone St., New York.
Edw. Hill's Sons & Co., 71 Pine St., N. Y.
A. Klipstein & Co., 122 Pearl St., New York.
James Lee & Co., 76 William St., New York.
Welch & Welch, 121 Broad St., New York.
Wing & Evans, 22 William St., New York.
Isaac Winkler & Bro., Cincinnati, O.

SOLUBLE COTTON.

Billings, Clapp Co., Boston, Mass.
Chas. Cooper & Co., 194 Worth St., New York.
Geo. A. Erkenbrach, 115 Maiden Lane, N. Y.
Fabrikoid Co., Newburgh, N. Y.
Maas & Waldstein, 107 Murray St., New York.

STRONTIA NITRATE.

R. W. Phair, 16 Platt St., New York.
Rogers & Pyatt, 78 Maiden Lane, New York.
The Roessler & Hasslacher Chemical Co., 100 William St., New York.

STONEWARE.

Arthur J. Weeks, Akron, O.

STRYCHNINE.

Merck & Co., New York.
N. Y. Quinine & Chemical Works, New York.
Powers & Weightman, Philadelphia.

SUGAR OF MILK.

Merck & Co., New York.
Schoellkopf, Hartford & Hanna Co., Buffalo and New York.

SULPHATE OF AMMONIA.

Cochrane Chemical Co., 55 Kilby St., Boston.
Fergusson Bros., Philadelphia.
Lister's Agri. Chem. Works, 26 B'way, N. Y.

SULPHATE OF SODA.

Cochrane Chemical Co., 55 Kilby St., Boston.
General Chemical Co., 25 Broad St., New York.
Merrimac Chem. Co., 75-77 Broad St., Boston.
Thomsen Chemical Co., Baltimore, Md.

SULPHUR AND BRIMSTONE.

Battelle & Renwick, 163 Front St., New York.
General Chemical Co., 25 Broad St., New York.
T. & S. C. White Co., 22 Burling Slip, N. Y.

TALC.

Geo. G. Blackwell, Sons & Co., Ltd., The Albany, Liverpool, England.
National Talc Co., 19 S. William St., N. Y.
C. K. Williams & Co., Easton, Pa.

TALLOW.

Welch & Welch, 121 Broad St., New York.

TARTARIC ACID.

Chas. Pfizer & Co., New York.
Powers & Weightman, Philadelphia.
Tartar Chemical Co., 92 William St., N. Y

TIN CANS.

American Can Co., 11 Broadway, New York.

TURPENTINE.

Standard Oil Co., New York.
A. L. Webb & Sons, Baltimore, Md.

VANILLA BEANS.

Dodge & Olcott, 86 William St., New York.
The Charles E. Hires Co., Philadelphia.
Thurston & Braidich, 128 William St., N. Y.

VANILLIN.

C. Bischoff & Co., 88 Park place, New York.
Dodge & Olcott, 86 William St., New York.
Fries Bros., 92 Reade St., New York.
The Charles E. Hires Co., Philadelphia.

VANILLIN (Continued).

A. Klipstein & Co., 122 Pearl St., New York.
Magnus & Lauer, 92 Pearl St., New York.
The Warner Chemical Co., Uwchland, Pa.

VARNISH.

Acme White Lead & Color Wks., Detroit, Mich.
Berry Bros., Ltd., Detroit, Mich.
Harrison Bros. & Co., Inc., Philadelphia.
Hoopie & Androvette, 218 Fulton St., N. Y.
John W. Masury & Son, New York.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.
Pratt & Lambert, Long Island City, N. Y.

VARNISH GUMS.

Edw. Hill's Sons & Co., 71 Pine St., N. Y.
Hoopie & Androvette, 218 Fulton St., N. Y.
Paterson, Boardman & Co., 133 Fulton St., New York.
Rogers & Pyatt, 80 Maiden Lane, New York.
S. Winterbourne & Co., 94 Pine St., N. Y.

WAX.

W. H. Bowdlear & Co., Boston.
Smith & Nichols, 145 Front St., New York.

WHITE LEAD.

Atlantic White Lead & Linseed Oil Co., 100 William St., New York.
Samuel H. French & Co., Philadelphia.
Harrison Bros. & Co., Inc., Philadelphia.
National Lead Co., 100 William St., New York.
J. Lee Smith & Co., 59 Frankfort St., N. Y.
Union Lead & Oil Co., 81 Front St., Brooklyn.

WINDOW GLASS.

American Window Glass Co., Pittsburgh, Pa.
Pittsburgh Plate Glass Co., Pittsburgh, Pa.

WOOD ALCOHOL.

Chas. Cooper & Co., 194 Worth St., New York.
Hoopie & Androvette, 218 Fulton St., N. Y.
Merrimac Chem. Co., 75-77 Broad St., Boston.
A. L. Webb & Sons, Baltimore, Md.
Wood Products Co., Buffalo, N. Y.

ZINC.

The New Jersey Zinc Co., 11 B'way, N. Y.

MACHINERY MANUFACTURERS

AUTOMATIC PRESSES.

American Process Co., 62 William St., N. Y.

BOLTING CLOTH.

P. F. Campbell, 55 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

BOLTING MACHINERY.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel St., Philadelphia.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

BURR STONES.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel St., Philadelphia.
Chas. Mill Supply Co., 15 S. William St., N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

CALDRONS.

Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
D. R. Sperry & Co., Batavia, Ill.

CEMENT MACHINERY.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

CENTRIFUGAL MILLS.

Am. Tool & Machine Co., 109 Beach St., Boston.
P. F. Campbell, 55 Laurel St., Philadelphia.
C. H. Chavant & Co., 117 Danforth Ave., Jersey City, N. J.

COOKERS.

American Process Co., 62 William St., N. Y.

DIGESTERS.

American Process Co., 62 William St., N. Y.

DISINTEGRATORS.

P. F. Campbell, 55 Laurel St., Philadelphia.
The J. H. Day Co., Cincinnati, O.
Chas. Ross & Son Co., 18 Steuben St., B'klyn.

DRUG MILLS.

P. F. Campbell, 55 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y.
The J. H. Day Co., Cincinnati, O.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
Raymond Bros. Impact Pulverizer Co., 143 Laflin St., Chicago, Ill.
Chas. Ross & Son Co., 18 Steuben St., B'klyn.

DRYING MACHINES.

American Process Co., 62 William St., N. Y.
American Vacuum Drying Machine Co., 120 Liberty St., New York.

ELECTRO MAGNETS.

Dixie Electro Magnet Co., Memphis, Tenn.

ELEVATING AND CONVEYING MACHINERY.

C. O. Bartlett & Snow Co., Cleveland, O.
H. W. Caldwell & Son Co., Western Ave., 17th and 18th Sts., Chicago, Ill.
P. F. Campbell, 55 Laurel St., Philadelphia.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
Link Belt Engineering Co., Nicetown, Phila.

ESOPUS MILLSTONES.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

EVAPORATORS.

C. O. Bartlett & Snow Co., Cleveland, O.

FERTILIZER MACHINERY.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y

FILTER CLOTH.

John Johnson & Co., 1 Franklin Sq., N. Y.
T. Shriver & Co., 341 E. 56th St., New York.

FILTER PRESSES.

John Johnson & Co., 1 Franklin Sq., N. Y.
Wm. R. Perrin & Co., 95-97 Liberty St., N. Y.
T. Shriver & Co., 341 E. 56th St., New York.
D. R. Sperry & Co., Batavia, Ill.
The Stilwell-Bierce & Smith-Vaile Co., Dayton, O.

FILTER PRESS PUMPS.

John Johnson & Co., 1 Franklin Sq., N. Y.
T. Shriver & Co., 341 E. 56th St., New York.
The Stilwell-Bierce & Smith-Vaile Co., Dayton, O.

GASKETS, COPPER.

United States Mineral Wool Co., Central Building, New York.

HYDRAULIC PRESSES.

William R. Perrin & Co., 1500-1522 6th St., Chicago.
The Stilwell-Bierce & Smith-Vale Co., Dayton, O.

LABORATORY MACHINERY.

The J. H. Day Co., Cincinnati, O.

LEAD WORKS MACHINERY.

H. W. Caldwell & Son Company, Western Ave., 17th and 18th Sts., Chicago.
P. F. Campbell, 55 Laurel St., Philadelphia.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

MINERAL WOOL.

United States Mineral Wool Co., Central Building, New York.

OIL MILL MACHINERY.

H. W. Caldwell & Son Company, Western Ave., 17th and 18th Sts., Chicago.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
The Stilwell-Bierce & Smith-Vaile Co., Dayton, O.

PAINT MILLS.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55-57 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y.
The J. H. Day Co., Cincinnati, O.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
Chas. Ross & Son Co., 18 Steuben St., B'klyn.
Waterville Foundry & Mfg. Co., Waterville, N. Y.

PAINT MIXERS.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55-57 Laurel St., Philadelphia.
The J. H. Day Co., 1144 (J) Harrison Ave., Cincinnati, O.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
Chas. Ross & Son Co., 18 Steuben St., B'klyn.
Waterville Foundry & Mfg. Co., Waterville, N. Y.

POWER TRANSMITTING MACHINERY.

H. W. Caldwell & Son Company, Western Ave., 17th and 18th Sts., Chicago, Ill.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
The Stilwell-Bierce & Smith-Vaile Co., Dayton, O.

PULVERIZERS.

C. O. Bartlett & Snow Co., Cleveland, O.
P. F. Campbell, 55-57 Laurel St., Philadelphia.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
Raymond Bros. Impact Pulverizer Co., 143 Laflin St., Chicago, Ill.

PUTTY MACHINERY.

P. F. Campbell, 55-57 Laurel St., Philadelphia.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

ROLLER MILLS.

Charles Mill Supply Co., 15 S. William St., N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
Raymond Bros. Impact Pulverizer Co., 143 Laflin St., Chicago, Ill.

ROTARY PUMPS.

Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

SPICE MILLS.

P. F. Campbell, 55-57 Laurel St., Philadelphia.
Charles Mill Supply Co., 15 S. William St., N. Y.
The J. H. Day Co., Cincinnati, O.
Faust Machine Works, Brooklyn, N. Y.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

STEAM FITTINGS.

Jenkins Bros., 71 John St., New York.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

SOAP MACHINERY.

H. W. Caldwell & Son Company, Western Ave., 17th and 18th Sts., Chicago.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

STEAM JACKET KETTLES.

Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
D. R. Sperry & Co., Batavia, Ill.

VACUUM DRYING MACHINES.

American Vacuum Drying Machine Co., 120 Liberty St., New York.
Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.

VACUUM PANS.

D. R. Sperry & Co., Batavia, N. Y.

VALVES.

Crosby Steam Gauge & Valve Co., Boston

WOOD WATER PIPES.

Chas. Kaestner & Co., 241 S. Jeff'n St., Chicago.
A. Wyckoff & Son Co., Elmira, N. Y.

Index to Advertisements.

Acker Process Co. ... 51
Acme Oil Co. ... 32
Adams & Elting Co. ... 14
Albany Chemical Co. ... 52
Algonquin Red Slate Co. ... 10
American Camphor Refining Co. ... 37
American Can Co. ... 25
American Chemical Co. (The) ... 52
American Cotton Oil Co. ... 18
American Linseed Co. ... 18
American Machinery & Construction Co. ... 26
American Process Co. ... 23
American Steel & Wire Co. ... 13
American Tool & Machine Co. ... —
American Vacuum Drying Machine Co. ... 23
American Window Glass Co. ... 6
Arabol Mfg. Co. (The) ... 14
Arnold Hoffman & Co. (Inc.) ... 53, 55
Atlantic Refining Co. ... 33
Austen, Peter T. ... 6
Baker & Bro., H. J. ... 35
Barker Bros. ... 39
Barrett Mfg. Co. ... 56
Bartels, Ernst C. ... 16
Bartlett & Snow Co. (The C. O.) ... 28
Battelle & Renwick ... 39
Beggs & Co., E. J. ... 55
Belknap, McSherry & Moran Co. ... 16
Bellhouse, Dillon & Co. ... 52
Berlin Aniline Works ... 55
Berry Bros. (Ltd.) ... 6
Bihn & Wolff Co. ... 13
Billings, Clapp Co. ... 35
Binney & Smith Co. ... 13, 49
Bischoff & Co., C. ... 45
Blackwell, Geo. G., Sons & Co. (Ltd.) ... 49
Borne, Scrymser Co. ... 2
Bowdlear & Co., W. H. ... 1
Boyer, J. R. C. ... 22
Bredt & Co., F. ... 54
Bristol Co. (The) ... 56
Brode & Co., F. W. ... 18
Brunner, Mond & Co. (Ltd.) ... 4, 51, 52
Cabot, Godfrey L. ... 13
Caldwell & Son Co., H. W. ... 26
Campbell, P. F. ... —
Carbondale Chemical Co. ... 52
Carleton, Ellis ... 22
Castner Electrolytic Alkali Co. ... 53
Cawley, Clark & Co. ... 13
Charles Mill Supply Co. (The) ... 23
Chavant & Co., C. H. ... 23
Chilian Nitrate Works ... 55
Chiris, Antoine ... 37
Church & Dwight Co. ... 52
Cochrane Chemical Co. ... 54
Columbia Chemical Co. ... 53
Columbia Refining Co. ... 56
Cooper & Co., Chas. ... 1
Crew Levick Co. ... 28a
Crosby Steam Gage & Valve Co. ... 56
Currie & Co., Charles Earl ... 11
Curtius, T. M. ... 36
Davidson, Julius ... 18
Day, J. H., Co. ... —
De Ronde & Co., A. ... 55
Devoe Mfg. Co. ... 33
Devold, Peder ... —
Diamond Soda Works ... 52
Dickinson Co. (The Albert) ... 39
Dillon & Co. ... 1
Dixie Electro Magnet Co. ... 26
Dixon Crucible Co., Joseph ... 56
Dodd & Co., A. W. ... 56
Dodge & Olcott ... 37
Dow Chemical Co. (The) ... 49, 50
Dreyer, P. R. ... 37
Duggan, E. F. ... 22
Eclipse Lubricating Co. ... 3
Elbert & Gardner ... —
Erkenbrach, Geo. A. ... 56
Evans & Sons (Ltd.) ... 56
Fabrikoid Company ... —
Farenholtz & Co., E. ... —
Fassbender & Co., E. ... —
Faust Machine Works (The) ... 25
Fergusson Bros. ... 49
Ferris, O. J. ... 10
Florida Cotton Oil Co. ... 19
Fratelli, Foti ... —
Fratelli, Jung ... 35
Freedom Oil Works Co. ... 28a
French & Co., Samuel H. ... —
Fries Bros. ... 38
Fritzlin, J. ... 39
Fuerst Bros. & Co. ... 44
Gabriel & Schall ... 16
Galena Signal Oil Co. ... 2
General Chemical Co. ... 48, 51, 55
German Kali Works ... 55
Globe Refinery Co. ... 19
Grasselli Chemical Co. ... 50
Haines, E. H. ... 11
Hammer & Hirzel ... 39
Harrison Bros. & Co. (Inc.) ... 14
Harshaw, Fuller & Goodwin Co. ... 38
Heitshu & Co., S. ... —
Heller, Hirsh & Co. ... 52
Heller & Merz Co. ... 54
Herrmann & Co., Morris ... 13, 16
Hill's Son & Co., Edward ... 16, 48, 50
Hires Co., Charles E. ... 1
Hollingsworth & Peterson ... 50, 55
Hoopie & Androvette ... 16
Hopkins & Co., J. L. ... 37
Hutchison, D. W. ... 37
Isdahl & Co. ... 37
Jarecki Chemical Co. (The) ... 55
Jenkins Bros. ... 56
Jobbins, Wm. F. ... 39
Johnson & Co., John ... 23
Kaestner & Co., Chas. ... 23
Kellogg, Spencer ... 19
Kendall & Flick ... 10
Kentucky Refining Co. ... 18
Kinsey & Johnston ... 16
Klipstein & Co., A. ... 44
Koechl & Co., Victor ... 38
Koenigswarter & Ebell ... 55
Kuttroff, Pickhardt & Co. ... 55
Lampel, Bruno ... —
Lamson & Bro., John ... 14
Lavino & Co., A. ... 37
Lee & Co., James ... 49
Lehn & Fink ... 1
Leonard & Co., Geo. H. ... 1
Lewis, John D. ... 54
Linder & Meyer ... 32
Link-Belt Engineering Co. ... 25
Lister's Agricultural Chemical Works ... —
Louisville Cotton Oil Co. ... 19
Lucas & Co., John ... 56
Maas & Waldstein ... 56
Magnus & Lauer ... 37
Manufacturers' Paraffine Co. ... —
Masury & Son, John W. ... 13
Mathieson Alkali Works ... 53
McKesson & Robbins ... 35
Meichoir, Armstrong & Dessau ... 56
Merck & Co. ... 47
Merrimac Chemical Co. ... 52
Metz & Co., H. A. ... 38
Michigan Alkali Co. ... 48
Michigan Carbon Works ... 10
Michigan Paint Company ... 1
Missouri Pacific Railway ... 25
Mohawk Paint & Chemical Co. ... 13
Moore & Co., Benjamin ... 14
Moritz & Pincoffs ... 22
Muralo Co. (The) ... 56
Myers, William S. ... 55
Naegely & Co. ... 22
National Lead Co. ... 12
National Talc Co. ... 16
N. J. Title Guarantee and Trust Co. ... 40
N. J. Zinc Co. ... 15
N. Y. C. & H. R. R. R. ... 23
N. Y. Quinine and Chemical Works ... 35
New York Shellac Co. ... 37
Nulsen, Klein & Krausse Mfg. Co. ... 1
Pacific Coast Borax Co. ... 35
Paragon Refining Co. ... —
Parke, Davis & Co. ... 39
Paterson, Boardman & Co. ... 56
Penna. Salt Mfg. Co. ... 52
Perrin & Co., W. R. ... 23
Pfizer & Co., Chas. ... 39
Phair, R. W. ... 35, 36
Philadelphia Clay Mfg. Co. ... 13
Philadelphia Varnish Co. ... 13
Pierce Company, F. O. ... 16
Pittsburgh Plate Glass Co. ... 16
Planchon, Aine ... —
Powers & Weightman ... 36
Pratt Mfg. Co. ... 33
Pratt & Lambert ... 16
Prenzlau's Fabrikwerke, L. ... —
Prince Manufacturing Co. (The) ... 14
Procter & Gamble Co. ... 19, 39
Raymond Bros. Impact Pulverizer Co. ... 25
Riker, J. L. & D. S. ... 46
Robinson & Co., W. A. ... 22
Roessler & Hasslacher Chemical Co. ... 38
Rogers & Pyatt ... —
Rosengarten & Sons (Inc.) ... 35
Ross & Son Co., Chas. ... 11
Rudd, F. M. ... 36
Salmon & Co., Hamilton H. ... 52
Schall, Dr. Eugen ... 16
Schepp & Zoon, C. L. ... —
Schieffelin & Co. ... 35
Schoellkopf, Hartford & Hanna Co. ... 34
Schroeder & Stadelmann (Ltd.) ... —
Schultz & Cie, Roger ... 39
Schutz & Co. ... —
Seaboard Refining Co., Ltd. (The) ... —
Seaver & Co. ... 13
Selling Company, The ... 56
Sharpless Dyewood & Extract Co. ... 55
Shepard & Co., T. P. ... —
Shriver & Co., T. ... 23
Siemon & Co., Wm. F. ... 56
Simes & Son, W. F. ... 39
Smith, A. W. (Ltd.) ... 13
Smith & Nichols ... 37
Soehne, Daniel Groz ... 35
Solvay Process Co. (The) ... 51, 52, 55
Southern Cotton Oil Company ... 20
Sozio & Andrioli ... 37
Sperry & Co., D. R. ... 23
Standard Oil Co. ... 2, 32, 33, 41
Stillwell-Bierce & Smith-Vaile Co. (The) ... 25
Stroud & Co., E. H. ... —
Tanite Co. (The) ... 56
Tartar Chemical Co. ... 44
Taylor, Edw. R. ... 52
Taylor & Barker ... 55
Thompson & Bedford Co. ... 2
Thomsen Chemical Co. ... 54
Thurston & Braidich ... 56
Tidewater Oil Co. ... 32
Todd Co., Ltd., A. M. ... 36
Trinity Cotton Oil Co. ... 18
Union Lead & Oil Co. ... 17
Union Petroleum Co. ... 1
United Alkali Co. ... —
United States Mineral Wool Co. ... —
United States Smelting Co. (The) ... 11
Vacuum Oil Co. ... 33
Vemian, A. K. ... —
Vickers & Sons, Benj. R. ... 22
Wachter Manufacturing Co. ... 16
Waddell & Co., R. J. ... 56
Warner Chemical Co. (The) ... 39
Waters Pierce Oil Co. ... 2
Waterville Foundry and Mfg. Co. ... 23
Webb & Sons, A. L. ... 1
Webb & Sons, James A. ... 1
Weeks, A. J. ... 55
Wegelin & Wilckes Black Mfg. Co. (The) ... 13
Welch & Welch ... —
Wetherill Co. (The S. P.) ... 2
Whitall & Co., J. W. ... —
White Co., T. & S. C. ... 36
White Tar Co. ... 56
Wiarda & Co., John C. ... 52
Wick Dept., Standard Oil Co. ... 41
Williams & Co., C. K. ... 13
Wing & Evans ... 4, 48, 52
Winkler & Bro., Isaac ... 53, 55
Winterbourne & Co., S. ... 56
Wise & Co., Charles L. ... 18
Wolf & Co., Jacques ... 55
Wood Products Co. ... 1
Wyckoff & Son Co., A. ... 23
Young, Frank L., & Kimball ... 18
Zimmer & Co. ... 35

IT IS NEARLY

HALF A CENTURY

since we commenced to make Varnish. During this period we have acquired a knowledge not only of Varnish, but of the varied needs of varnish consumers that nothing but time can impart, and have also learned how to cater successfully to every varnish want.

Our experience belongs to those who use and sell Berry Brothers' Varnishes.

Safest goods to handle, surest and most reliable goods to use.

Write for Catalogue.

BERRY BROTHERS, Limited.

NEW YORK, BOSTON, PHILADELPHIA, BALTIMORE, CHICAGO, CINCINNATI, ST. LOUIS, SAN FRANCISCO.

MANUFACTURERS OF EVERY GRADE OF VARNISH FOR EVERY USE KNOWN.

FACTORY AND MAIN OFFICE, DETROIT.

DR. PETER T. AUSTEN, F.C.S.
CHEMICAL EXPERT.
Manufacturing Chemistry, Processes, Products, Patents, Wastes, Costs, Nuisances, &c.
Experimental Tests and Investigations.
Expert in Patent and Technical Litigation.
89 Pine St., NEW YORK.

J. A. CHAMBERS, President. M. K. McMULLIN, First Vice-President.
WM. G. McCANDLESS, Treasurer. WM. LOEFFLER, Second Vice-President.
E. I. PHILLIPS, Secretary. T. F. HART, Third Vice-President.

The American Window Glass Company

MANUFACTURERS OF

WINDOW GLASS

We Guarantee Our Product Superior to any Sheet Glass Made.

GROUND AND CRYSTALLIZED GLASS.

Offices: Westinghouse Building, Pittsburg, Pa.

Oil, Paint and Drug Reporter

EMBRACING THE DRUG, PAINT AND OIL TRADE, NEW YORK DRUG BULLETIN, NEW YORK DRUGGISTS' PRICE CURRENT, SOAP MAKERS' JOURNAL, OIL AND PAINT REVIEW, AND WEEKLY DRUG NEWS.

WILLIAM O. ALLISON, Publisher.

PUBLISHED EVERY MONDAY
At 100 William Street, New York.

SUBSCRIPTION RATES.

For U. S. and Canada.....$6.00
Subject to a discount of $2.00 if paid strictly in advance.
To all Foreign Countries (including postage) in advance.....$6.00

ADVERTISING RATES.

One page,	one year	$1,600.00
Half page,	" "	850.00
Quarter page,	" "	450.00
Ten inches,	" "	375.00
Eight inches,	" "	320.00
Six inches,	" "	260.00
Four inches,	" "	180.00
Two inches,	" "	100.00

These prices are absolutely net.
First page, $100 per inch per year. Last page, $60 per inch per year.
An advance rate is charged for preferred positions.

WANT COLUMN (page 22).

Advertisements inserted in this column are charged for at the minimum rate of Two Dollars per insertion. This price is based on forty-eight words. Should the advertisement exceed forty-eight words, an additional charge of twenty-five cents for each line of six words is made.

MACHINERY INFORMATION DEPARTMENT, page 23.

NO ORDER GIVEN TO ANY AGENT OR REPRESENTATIVE OF THIS PAPER BECOMES BINDING UNTIL APPROVED BY THE PUBLISHERS.

NEW YORK, JULY 20, 1903.

CONTENTS.

Markets.	Page.
Paint Market	11
Oil Market	19
Naval Stores Market	22
Petroleum Market	28
Drug Market	35
Chemical Market	49
Dye Market	54

For complete table of contents of this issue see page 22.

VERY SMALL OPIUM CROP.

Estimates of the 1903 opium crop grow beautifully less from day to day, and it is now figured that the total outturn in Turkey will not exceed 2,500 cases. If this proves to be a fact, and there is nothing in the situation at present to cast any doubt on the matter, it will be the lightest crop in fifteen years, as will be seen by the following figures, which show the outturn of each year since 1888:—

Year.	Cases.	Year.	Cases.
1903	*2,500	1895	7,800
1902	10,500	1894	4,500
1901	5,600	1893	2,845
1900	8,200	1892	7,500
1899	6,400	1891	7,400
1898	3,000	1890	6,300
1897	7,000	1889	5,500
1896	3,600	1888	8,700

*Estimated.

The nearest approach to the estimated crop of 1903 was in 1893, when the outturn was 2,845 cases. Going back still further, there was a very light crop, only 2,100 cases, in 1880, but this was followed in 1881 by a yield of 11,500 cases.

There has been a very fair demand for opium this week and, on this account, as well as in sympathy with the strong cable advices, the market is very firm and higher, with indications that further advances in values will be made shortly. The belief expressed not long ago that the New York market price would rise to at least three dollars and a half has been realized, and the idea that the four dollar mark may be reached would seem not extravagant. In response to a request, we publish below a table showing the highest and lowest prices quoted in this market, during each of the last ten years:—

Year.	High.	Low.	Year.	High.	Low.
1902	$3.05	$2.70	1897	$2.80	$1.92½
1901	3.45	3.00	1896	2.40	1.90
1900	3.45	3.00	1895	2.30	1.60
1899	3.37½	2.80	1894	3.25	1.85
1898	3.75	2.70	1893	3.15	1.77½

IMPROVED POSITION OF QUININE.

The position of the market for quinine has improved considerably during the week. There has been more demand, although in a small way mostly; the stock of fresh German salt in second-hands is daily becoming scarcer, the shipments of cinchona bark, from Java to Europe, during the first half of the month, were smaller than during the same period of last month and the amount of bark offered for the Amsterdam auction next Thursday is considerably less than the offerings for the preceding sale. The shipments of bark during the half month are shown in the following comparative table:—

	Dutch Pounds		
	1903.	1902.	1901.
January	220,000	507,000	600,000
February	340,000	315,000	525,000
March	646,000	396,000	620,000
April	630,000	470,000	450,000
May	612,000	465,000	225,000
June	692,000	665,000	500,000
July	610,000	700,000	690,000
August	.....	1,125,000	590,000
September	.....	185,000	600,000
October	.....	1,100,000	625,000
November	.....	780,000	865,000
December	.....	780,000	500,000

Manufacturers have made no change, as yet, in their quotations, but if, as is hoped, the bark sale on Thursday goes off at an advance, prices are expected to go higher. This sale is particularly important, as none is scheduled to be held in August. As will be seen by the following table, which gives the offerings of bark at each sale since the first of 1901, the amount offered for the coming auction is below the average of the period covered by our figures:—

	Packages		
	1903.	1902.	1901.
January	10,990	9,471	7,487
February	5,235	8,467	8,847
March	No sale.	No sale.	6,832
April	8,936	6,780	No sale.
May	4,904	5,912	7,515
June	11,446	6,291	5,624
July	6,978	6,816	4,979
August	....	8,950	8,033
September	....	No sale.	No sale.
October	....	6,317	6,462
November	....	10,449	9,305
December	....	9,181	9,079

FIRM MARKET FOR SHELLAC.

The position of shellac, in all markets of the world, is exceptionally strong and bids fair to continue so for many months to come. The present condition of affairs is due to perfectly natural causes of supply and demand and not to manipulation, although it must be said that there has been considerable of this, and the world is now facing a genuine shortage, which it will take a long time to make up, even though the crop prospects are very good. The increase in the demand for shellac this year, has been very large in all markets, but especially so here. As is well known, it is practically impossible to obtain definite figures showing the position of the New York market, but, as an illustration of the decrease in stocks, we publish a few statistics regarding the London market, showing the stock held there on July 1, of the years specified below:—

	1903.	1902.	1901.	1900.	1899.	1898.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Orange..	11,052	23,487	33,351	31,508	37,135	43,923
Garnet..	7,015	3,539	3,780	2,680	4,397	7,399
Button..	4,003	4,547	5,389	7,324	6,261	6,175
	22,070	31,573	42,520	41,512	47,793	57,497

On July 1, the price of T.N. in the London market, was one hundred and thirty-six shillings per hundredweight, representing an advance of thirty-three shillings in a year and of seventy-five shillings over the price quoted on the same date of 1901. The New York market price on July 1, 1903, was thirty-two cents per pound, against twenty-six cents a year ago and fourteen and three-quarter cents on July 1, 1901. The shipments of shellac from Calcutta to the United States during each month from January, 1900, to June, 1903, are shown below:—

	1903.	1902.	1901.	1900.
	Cwt.	Cwt.	Cwt.	Cwt.
January	9,200	4,000	4,900	8,600
February	3,800	3,800	7,400	4,200
March	7,000	6,500	3,500	11,800
April	5,000	9,400	16,400	9,400
May	6,200	3,300	6,900	5,700
June	10,200	6,300	9,400	1,300
July	....	1,400	Nil.	6,500
August	....	5,100	3,800	2,500
September	....	1,900	2,700	1,000
October	....	10,400	6,900	4,400
November	....	7,300	4,400	6,200
December	....	8,100	1,000	11,300
Totals	41,400	67,500	67,300	73,500

PRIME LARD OIL LOWER.

The market for prime lard oil showed decided weakness and steady declines in prices during the past ninety days. The chief depressing factors are the heavy supplies in the hands of manufacturers and the continued downward course in prices for lard. In response to the anxiety on the part of large holders of oil to market their stock buyers are taking advantage of same and continue to adhere to the hand to mouth policy in making purchases, in the expectation of prices seeking a much lower level in the near future. Despite the recent sharp advance in prices of lard, prices of prime oil were not affected and large offerings were pressed for sale at lower prices. It was intimated that the sudden upward turn in prices of lard was solely attributed to speculative manipulations, in order to squeeze shorts. The heavy supplies of oil presently carried by most manufacturers is mostly high cost, and it is intimated in trade circles that the greater part of this oil shows a material loss. The normal price of prime lard oil, according to local members of leading firms, is about sixty-four cents. On May 4, 1903, the price of prime oil was eighty-five cents, showing a decline up to the present period of about nineteen cents.

The subjoined table shows the highest and lowest quoted prices in the New York market for each month since January, 1899, and also the highest and lowest points touched in each year from 1899 to July 18, 1903, inclusive. The figures are based on the closing quotation each successive week:—

	1903.		1902.		1901.		1900.		1899.	
	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.
Jan.	88	87	80	78	66	65	50	46	46	45
Feb.	86	85	78	76	66	64	53	50	46	45
Mar.	85	84	80	75	66	65	52	51	45	44
April	85	83	84	79	70	68	61	54	44	43
May	82	79	83	80	67	65	59	58	44	43
June	75	70	80	79	69	65	57½	56	42	40
July	70	66	86	81	70	69	57	55	43	40
Aug.	..	..	83	78	69	68	55	55	42	41
Sept.	..	..	79	77	80	69	55	54¾	44	41
Oct.	..	..	84	78	80	74	58	56	45	43
Nov.	..	..	90	86	72	70	63	57	44	44
Dec.	..	..	89	87	80	76	65	63	45	43
Year.	..	..	90	75	80	64	65	46	46	40

JUNE PETROLEUM STATISTICS.

The reports of the several pipe lines, giving the statistics of production and deliveries of crude oil in the older producing States, showed a marked change in the statistical situation, though the drain on the stocks above ground has not been overcome by the increase in production. The result of the extraordinary activity in field operations is seen in the increase of 147,000 barrels in the total production as compared with May, and there being a decrease of 74,000 barrels in the amount of the deliveries the drain on the stocks in possession of the pipe lines has been reduced, the stocks having been drawn upon to the extent of only 92,000 barrels, while during May the decrease in stocks amounted to more than a quarter of a million barrels. This radical change constitutes the important feature of the monthly field report. It is not expected, however, that similar conditions will prevail during the current month, and the increase in production has no effect, the situation being still regarded as decidedly strong. During the first half of the present month the deliveries show a considerable increase, while the field reports do not indicate there will be a further increase in total production. It required the drilling of more than 1,700 wells during June to bring about this increase in total production, the amount of the new production being over 18,000 barrels per day. It is exceedingly doubtful if the same number of wells will be completed during the present and succeeding months and that the amount of new production can be kept near the June record. The June report is consequently regarded as exceptional, due to conditions which are not expected to prevail during the present month, in fact the export movement thus far shows a very large increase, which will have an important influence on the volume of the deliveries by the pipe lines. It is not believed that even with the addition of the production of the Kentucky fields the stocks can be kept from diminishing, as with an increase in production and decrease in deliveries during the past month the stocks were drawn upon to make up a deficiency of over 92,000 barrels.

The total production during the month of June, as represented by pipe line runs, amounted to 4,476,212 barrels, showing an increase, as compared with the production during May, of 147,885 barrels. The total was made up of 2,678,675 barrels of the Pennsylvania grades and 1,797,537 barrels of the Ohio grades. The former showed an increase of 79,731 barrels and the latter an increase of 68,154 barrels. The deliveries during May amounted to only 4,741,247 barrels, showing a decrease of 74,559 barrels. The deliveries were made up of 2,670,232 barrels Pennsylvania oil and 2,071,015 barrels Ohio oil, the former showing a decrease of 65,564 barrels and the latter a decrease of 8,995 barrels. The stocks in possession of the pipe lines at the close of the month amounted to 21,487,221 barrels, of which 5,566,926 barrels were of the Pennsylvania grades and 15,920,295 barrels were of the Ohio grades. The former showed an increase of 19,697 barrels and the latter a decrease of 112,026 barrels, making the net decrease in stocks during the month 92,329 barrels. The total production of the Kentucky field is estimated at about 50,000 barrels, most of which is believed to have been delivered to the refineries, and does not, of course, affect the statistical situation. The decrease in stocks since the beginning of the year amounts to 1,518,332 barrels, showing an average shrinkage of 253,055 barrels per month.

DECREASED EXPORTS OF LARD AND TALLOW.

The Bureau of Statistics of the Treasury Department has compiled the statistics of the exports of provisions for the fiscal year ended June 30, from which it appears that the shipments to foreign countries of lard, tallow and oleo oil have decreased considerably, as compared with the fiscal year preceding. The shipments of lard during the past fiscal year amounted to 482,438,554 pounds, showing a decrease of 74,401,668 pounds. The decrease has been quite steady during the year, and, during June, as compared with June last year, the decrease amounts to nearly 1,000,000 pounds. The higher prices at which the product has sold has, of course, affected the exports, although other causes have contributed to check the demand from abroad.

The exports of tallow during the last fiscal year show a falling off of 6,930,709 pounds, but during June the shipments were unusually heavy, exceeding those during June of last year by nearly 3,000,000 pounds. The conditions abroad affecting the demand were not analogous to those affecting lard, and it is probable a comparison of the statistics for the calendar year will make even a more favorable showing for tallow.

The exports of oleo oil during the fiscal year amounted to 125,848,134 pounds, and showed a decrease of 12,697,954 pounds. During the month of June there was shown an increase of over 5,000,000 pounds as compared with June of last year. The shipments of oleo oil, however, make a better showing.

The following table shows the amount of lard, tallow, oleomargarine and oleo oil, in pounds, exported during each of the past ten fiscal years:—

Year.	Lard.	Tallow.	Oleomargarine.	Oleo Oil.
1894.	447,566,867	54,661,524	3,898,950	123,295,895
1895.	474,895,274	25,364,300	10,100,897	78,098,878
1896.	509,534,256	52,759,212	6,063,699	103,276,756
1897.	568,315,640	75,108,834	4,864,351	113,506,152
1898.	709,344,045	81,744,809	4,328,536	132,579,277
1899.	711,259,851	107,361,009	5,549,322	142,390,492
1900.	661,813,663	89,030,943	4,256,067	146,739,681
1901.	611,357,514	77,166,889	4,990,699	161,651,413
1902.	556,840,222	34,065,758	5,721,254	138,546,088
1903.	482,438,554	27,135,049	7,442,447	125,848,134

The Treasury regulation of August 1, 1896, establishing a rate for allowance of drawback on the exportation of refined glycerine has been extended so as to cover refined glycerine manufactured by the Harshaw, Fuller & Goodwin Co. of Cleveland, O., manufactured from imported crude glycerine.

TRADE ITEMS.

(For other Trade Items see table of contents on page 22.)

J. J. Caffrey, president of the Louisville Cotton Oil Company of Louisville, Ky., was in the city during the week.

Spencer Robinson, of Hamill & Gillespie, left this city on Monday of last week and is rusticating in Sullivan county.

Proposals to supply oils, turpentine, muriatic acid, metal polish, etc., will be received at the Army Building, this city, until July 27.

A. P. Sauer, of New Orleans, and Fred Oliver, of Norfolk, Va., have been in the city during the week calling on the cotton oil trade.

The Bellefonte Window Glass Co.'s plant at Bellefonte, Pa., was destroyed by fire July 12. The loss on the glass plant is $60,000; insurance, $11,000.

Harry P. Johnson, manager of the Southern Cotton Oil Company, of Memphis, Tenn., with his family, is spending the summer months at Point Breeze on the Jersey coast.

Charles F. Raymond, president of the Manhattan Oil Co., of this city, has returned after a ten days' cruise on the Long Island Sound in company with the Brooklyn Yacht Club.

The shipments of phosphate rock from the port of Charleston, S. C., during the month of June amounted to 2,050 tons, 549 tons going to Barren Island and 1,501 tons to Baltimore.

Ludington Patton, secretary and treasurer of the Patton Paint Co., Milwaukee, Wis., was in the city last week. Mr. Patton made his headquarters at the Newark branch of his concern.

It is reported that the National Glass Company was one of the heaviest losers in the Jeanette flood. Its plant was directly in the path of the rushing waters, and all the furnaces were submerged.

According to latest advices from Monongahela, Pa., the Wightman plant of the American Window Glass Co., which is located at the above place, has completed the work of installing glass blowing machines.

The improvements in the Long Island Railroad yards at Long Island City are said to contemplate the acquisition of the land occupied by the varnish works of Mayer & Lowenstein and the Feuchtwanger Chemical Works.

H. A. Fisher, who has managed the dry color department for J. A. & W. Bird & Co., of this city, will represent Mr. Ernst C. Bartels, of Hamburg, in the United States and Canada for the sale of French ochers, colors, etc.

The following additional awards are announced for dry color supplies by the Bureau of Supplies, Washington:—140,000 lbs. milori green No. 1, 20⅞c., Harrison Bros. & Co., Inc; 1,000 lbs. milori yellow No. 3, 11c., Fred L. Lavanburg.

An explosion took place on July 13 at the Laflin Powder Mills, near Moosick, twelve miles from Wilkesbarre, Pa. Three men were killed, and it is thought that several others are mortally injured. The corning mill and the press building were all demolished.

In the "want" columns of this issue there appears an advertisement over the signature "Box 10." The advertiser bears the highest credentials, and any concern that wishes a thoroughly competent salesman would not make a mistake in communicating with the advertiser.

In the "want" columns of this issue there appears an advertisement signed "Superintendent." The advertiser is a large and well-known concern, and an exceptional opportunity is offered to a thoroughly practical paint superintendent to obtain a good position with a first-class house.

M. P. Jacobs, who was with Morrisson, Plummer & Co. for a quarter of a century and left them some months ago to take a position with the Montana Drug Company, has been appointed manager and buyer of the latter concern. His friends in the trade congratulate him on his new position and wish him success.

The Commonwealth of Australia Gazette contains a customs by-law issued by the Department of Trade and Customs on April 3 last, with regulations affecting the methylation of cottonseed oil within the commonwealth. The by-law provides that the methylating substances which may be used for methylating cottonseed oil shall be resin, cod oil, or whale oil in the proportion of not less than 5 per cent. to the quantity of cottonseed oil to be methylated.

Lewis & Neyland, of Woodville, Miss., are making extensive improvements on their cottonseed delinting plant. They have discarded the cottonseed delinter which they had and have contracted with the American Machinery and Constructing Co., of Vicksburg, Miss., for a complete outfit of their Baxter cottonseed delinters. The capacity of the plant will be considerably increased.

In affirming the case of Bennett vs. Carr the Michigan Supreme Court practically gives a death blow to the Michigan Anti-Colored Oleomargarine law by declaring it not a violation of the law to manufacture or sell oleomargarine colored with an ingredient coloring matter, such, for instance, as crude cottonseed oil, which is an ingredient, and when not refined gives the product the desired butter color.

The American Cotton Co. is disposing of all its round bale cotton-gin plants in Texas to the Texas Cotton Products Co., of New York. The latter was organized last year and is understood to be one of the auxiliary companies of the combine. In addition to its round bale plants, the American Cotton Co. owned a large amount of real estate in Texas, all of which is being transferred to the Texas Cotton Products Co.

The Dixie Electro Magnet Co., Memphis, Tenn., recently received an order from the Buckeye Cotton Oil Co. for forty additional Dixie magnets. We are informed that this makes ninety-six Dixie magnets which the Buckeye Co. is now operating in its mills. The fact that over one thousand Dixie electro magnets are now used is proof of the value which is placed upon them. For full particulars write the Dixie Electro Magnet Co., Memphis, Tenn.

A special committee of the American Electrochemical Society has been appointed to take charge of an exhibit of the society in the Electricity Building at the Louisiana Purchase Exposition. The committee is anxious to secure all the information possible regarding the whereabouts of historical and experimental apparatus which can be exhibited either in the original form or by reproduction or photograph, in the name of the society collectively and in the name of the individual exhibitors specifically.

E. S. Whitman, who has been connected with the Southern Cotton Oil Company, of this city, for many years, has resigned and retired from active business. The Board of Directors at a recent meeting appointed Mr. T. S. Young, who is an assistant to Vice-President L. W. Haskell, to take personal charge of the foreign and New York sales departments. Mr. E. S. Whitman will still be connected with the company in an advisory capacity, and his son, E. P. Whitman, will be an assistant to Mr. Young.

Those desiring a covering for underground steam and hot water pipes that will prevent heat losses and will keep the ground water from the pipes, should consult A. Wyckoff & Son Co., Elmira, N. Y., whose patent covering is light in weight, is easily and cheaply installed, is permanently waterproof, and is very durable. The patent covering is made of selected white pine which resists rot. The outside being covered with a heavy coating of asphaltum pitch as a protection against the earth. The covering is a perfected insulation and absolutely prevents the radiation of heat in the ground pipes.

Since the loss of Formosa, the camphor trade has been lost to China. The Chinese endeavored to make good this loss by trying to grow the tree in China itself. News has now come that the trial has proven to be successful in the province of Hunan. There are now countless camphor trees several feet in diameter in the province, and it is expected that with care it will be possible for Hunan soon to be able to export annually several thousand piculs of the drug. The market is at present dependent chiefly upon the supply from Formosa and Sumatra, and in consequence the price keeps high.—Bangkok Times.

Dr. Boswell Ward, president of Ward Bros.' Drug Co., Indianapolis, Ind., died at Winona Lake, Ind., on July 9. Dr. Ward was born at Rockville, Ind., May 29, 1831, and lived there until ten years old. He began the study of medicine at Brookville, Ind., in 1853, and graduated at the Rush Medical College, Chicago, in 1862. Dr. Ward began the practice of medicine at Laurel, Ind. In 1863, he married Miss Josephine Haile, of Brookville, Ind. They moved to Indianapolis in 1867. In 1876, Dr. Ward formed a partnership with his brother in the retail drug business. They soon added a city jobbing trade to their business, and in 1880 engaged in the wholesale drug business. Dr. Ward leaves a widow and two daughters.

C. Harold Smith, of the Binney & Smith Co., sailed on the Minnehaha on the 11th inst. for London. Mr. Smith will be abroad for about three months and will visit England, France, Germany and Spain.

A petition has been filed with the United States Circuit Court in Concord, N. H., setting forth the grievances of the bondholders of the White Mountain Paper Co. Exhibit "D" annexed to the petition shows the capital of the company to be $25,000,000, of which bonds are $10,000,000, preferred stock $5,000,000 and common stock $10,000,000. The assets are given as land costing in cash, in bonds and in preferred and common stock, $8,000,000; the promises of Charles E. Locke, the promoter, to furnish $3,000,000; bonds returned by Locke, $1,300,000; stock returned by Locke, $2,250,000; leaving $9,250,000 given to Locke. The exhibit adds that "therefore, 16 minutes after its organization the White Mountain Paper Co. expended its entire capital of $25,000,000 and had less than $15,000,000 to show for it."

(For other Trade Items see table of contents on page 22.)

PETROLEUM NOTES.

In the Lewisville district, Monroe county, O., W. G. Decker's No. 14 on the Henry Dillon farm is producing 90 barrels a day from the Big Lime.

In the Corning district, Perry county, O., the Phoenix Oil Co. has completed a test on the Samuel Cagg farm and has a show for a 5-barrel pumper.

In the Cairo district, Ritchie county, W. Va., R. G. Gillespie has completed his No. 12 on the M. D. Cowan farm and has a 5-barrel pumper in the salt sand.

In the Macksburg field, in Washington county, O., J. A. Dutton has completed No. 10 on his own farm and has a 150-barrel producer in the Buell run sand.

Near New Matamoras, in Washington county, O., the Berea Oil Co. has completed its second test on the James Amos farm and has a 30-barrel producer.

In the shallow sand territory in Morgan county, O., J. C. Schram has competed a second test on the Harrison Porter farm and has a 15 or 20-barrel pumper.

Northwest of the Scio field, in Harrison county, the Nassau Oil Co. has completed its No. 15 on the John McLandsborough farm and has a small pumper.

In Plum run district, in Harrison county, O., the Chicago-Ferndale Oil Co. has completed its second test on the S. G. Patton farm and has a 5-barrel pumper.

Northeast of the Fink district, in Lewis county, W. Va., Fred S. Rich & Co. have a promising fifth sand producer thought to be good for 30 or 40 barrels a day.

In the Jackson Ridge field, Monroe county, O., on the D. S. D. Devore farm, the Keener Oil & Gas Co. has completed their No. 5 and have a 10-barrel pumper.

In the Eureka district, Pleasants county, W. Va., the Central Oil Co. has completed its No. 42 on the J. R. Reynolds farm and has a show for a 25-barrel producer.

In the Moscow development, in Hancock county, W. Va., Charles Brown's Sons have completed No. 6 on the Charles Brown farm and have a show for a 5-barrel pumper.

In the Jackson Ridge field, in Monroe county, O., the Consolidated Oil Co. has drilled its No. 13 on the S. W. Covert farm through the Keener sand and has a 5-barrel pumper.

In the Trail Run development in Munroe county, O., the Ann Oil Co. has completed a test well on the Elizabeth Nolden farm and has a small pumper in the Keener sand.

Two miles north of the Knoxville pool, in Jefferson county, O., E. H. Jennings & Bros. have drilled in a wildcat on the John Smith farm that looked like a 15 or 20-barrel producer.

In the Big Injun sand development near Mannington, Marion county, W. Va., the Burt Oil Co. has completed a test on the Nancy Irwin farm and has a show for a 50-barrel producer.

In the Carson pool, Hancock county, W. Va., Watson & Co. have completed a test on the James Lindorf farm and have a show for a small pumper. Haskell & Hopkins have completed No. 17 on the S. Cable farm and will have a 12 or 15-barrel pumper.

North of Knoxville, near Empire, Jefferson county, O., E. H. Jennings & Bros. have completed and shot their test on the John Smith farm and have a show for a 25 or 30-barrel pumper.

In the Brush Creek field in Alleghany county, Pa., the Southern Oil Co. has completed its test on the Robinson heirs' farm and has an 18 or 20-barrel producer in the 100-foot sand.

In the Stout development in Doddridge county, W. Va., the Carter Oil Co. has drilled its No. 12 on the W. M. Stout farm through the Gordon and has a show for a 10 or 15-barrel pumper.

On the east side of the Folsom district, in Harrison county, W. Va., the Delmar Oil Co. has completed its test on the Mahala Looman farm and has a show for a 30-barrel producer in the Gordon.

To the northwest of the old Fink district, in Lewis county, W. Va., the South Penn Oil Co. has drilled its second test on the M. A. Fahey farm into the Gantz sand and has a show for a 10-barrel pumper.

In the old development south of Knoxville, Jefferson county, O., Freudenberger & Sinclaire have completed their Nos. 6 and 9 on the John Cooper farm. No. 6 is producing 100 barrels a day and No. 9 25 barrels.

In the fifth sand development in the Fairview district, Marion county, W. Va., the South Penn Co. has drilled through and shot its second test in the Big Injun sand, and has a show for a 15-barrel producer from that level.

Northeast of the Big Injun sand development, on Fallen Timber run, Wetzel county, W. Va., Smith & Carnahan have at last drilled their test on the E. T. Postalwait farm into the Big Injun, and at 75 feet in have only a small showing of oil.

On the west side and some distance in advance of the fifth sand development in the old Fairview district, in Marion county, W. Va., the South Penn Co.'s No. 4 on the M. E. Brookover farm is flowing by heads and producing 160 barrels a day.

In the Folsom district, in Wetzel county, W. Va., the South Penn Oil Co has completed No. 2 on the A. E. Snodgrass farm and has no better than a 3-barrel pumper. The same company's No. 5 on the W. B. Starkey farm is good for 25 barrels and No. 2 on the J. M. Price farm, 45 barrels a day.

In the Meadville district, Tyler county, W. Va., the Carter Oil Co. drilled in a test on the John S. Bullman farm and the well is reported showing for 100 barrels a day. In the Hebron district the same company has completed its No. 4 on the F. T. McCullough farm and will have a 10-barrel pumper in the Big Injun sand.

In Sycamore valley, north of the Clear Fork development in Monroe county, O., the Carter Oil Co. has completed a second test on the E. P. Prior farm and has a 5-barrel pumper in the Berea grit. The Carter company has drilled its No. 5 on the W. A. Price farm into the same formation and has a 6-barrel pumper.

In the Marietta district, in Washington county, A. A. Cameron has drilled his No. 4 on the J. A. Arnold farm into the sand and has a show for a 15-barrel pumper. In the same district George L. Craig & Co. have completed and shot their No. 19 on the Reppert heirs' farm and will have a very light pumper in the Rippert sand.

In the northeast end of the Folsom district, in Harrison county, W. Va., the Delmar Oil Co. has completed and shot its No. 3 on the Joshua Looman farm and has a 5-barrel pumper. In the same district the Delmar Co. has completed and shot its No. 3 on the A. J. Ice, Jr., farm and the well produced 140 barrels the ensuing 24 hours.

In the Pine Grove extension, in Wetzel county, W. Va., the South Penn Oil Co. has completed its second test on the Richard Postalwait farm and has a 20-barrel pumper. On the west side of the same district the Linden Oil Co. has drilled in its No. 3 on the Yeater-Pyle farm and has a show for a 40-barrel producer in the Gordon sand.

In the Rinards Mills district in Munroe county, O., the Hartman Oil Co. has completed its test on the Mrs. E. B. Cline farm and has a show for a 12 or 15-barrel pumper in the Berea grit. In the same district, across the line in Washington county, the Flat Rock Oil Co. has drilled its No. 3 on the Eliza Dimberling farm through the Big Injun and will have an 8 or 10-barrel pumper.

In the Burning Springs district in Wirt county, W. Va., the Bridgewater Gas Co. has drilled its second test on the Patterson farm through the Big Injun and, at a depth of 1,140 feet, has a show for an 8 or 10-barrel pumper. In the same district the Carter Oil Co. has completed its No. 10 on the S. F. Foltz farm and has a 5-barrel pumper in the Maxon sand.

In the lower end of the Folsom district, in Wetzel county, W. Va., the South Penn Oil Co. reached the pay at 10 feet in the Gordon at its No. 44 on the big Robinson tract, and the well produced 65 barrels the first 24 hours. In the northeast end of the district in Harrison county, W. Va., the Delmar Oil Co. has completed its test well on the William E. Burnett farm, located on Big Elk run, and has a 40-barrel producer in the Gordon sand.

The value of the kerosene imported into Japan during 1902 was £1,524,838, as compared with £1,525,472 in 1901. This shows a very slight falling off. In June the International Oil Co., mentioned in the trade reports of 1901 and 1902 commenced to put its native product on the market in the Kobe district. It is reported in the Japanese papers that this company is now endeavoring to obtain a concession in the Hokkaido. Dutch India oil, of which in 1901 6,611,257 gallons were imported, was not represented in the trade returns for 1902.

A peculiar suit growing out of the boom days of Spindle Top has been brought in the Texas Circuit Court, where one firm is suing another for storing oil that never was produced. In other words, the owners of oil storage agreed to store 100,000 barrels for the owners of an oil well, but the well failed to deliver the goods and the storage firm demands payment for the use of its storage tanks just the same. The plaintiffs in the case are S. B. Babbitt et al. and they demand of W. H. McDonald and others $5,000. In the petition it is alleged that on July 10, 1902, the defendants entered into a contract with the plaintiffs by the terms of which the former agreed to receive and store for them 100,000 barrels of crude petroleum oil at their tanks near Spindle Top, the consideration to be $5,000, payable $100 cash and the remainder in monthly installments. Petition further sets forth that at the time said contract was entered into the demands for storage for oil at Spindle Top was very great and the plaintiffs could easily have secured contracts with many others for storing their oil. That shortly thereafter the production of oil at Spindle Top began to diminish, whereupon the defendants refused to carry out the terms of their agreement or to deliver to the plaintiffs the said oil for storage to plaintiff's damage in the above sum, for which judgment is prayed for together with interest and costs of suit.

OBITUARY.

Stephen Parlin.

It is with much sadness that we announce the death of Stephen Parlin, which occurred on Tuesday last while undergoing an operation for irreducible hernia at the German Hospital in Chicago. Mr. Parlin was an old-time newspaper man, having been connected with several of the principal daily publications in Chicago, but during the past ten years he has been in the employ of the Oil, Paint and Drug Reporter as its Chicago correspondent. Mr. Parlin had the respect and confidence of his business associates, and made many friends. His frequent calls at the Chicago offices of the leading concerns in the branches covered by the Oil, Paint and Drug Reporter will be missed by many. The funeral took place on Thursday last.

We are in receipt of the following letter from one who has known Mr. Parlin and his work, which evidences the esteem for the man and the appreciation of the faithful performance of his duty as correspondent by those who came in daily contact with him:—

Chicago, July 15, 1903.

Editor Oil, Paint and Drug Reporter:—

I am very much surprised to hear of the death of Mr. Stephen Parlin, your very competent and gentlemanly correspondent, for it was only last week he was in my office to discuss the flax situation and he seemed to be looking as well as usual.

I consider Mr. Parlin was the best flax crop reporter in this country. He went at the subject as a student from the first, and devoted a great deal of time to personal investigation and experiment.

When he took up your work he was frank enough to confess that he knew nothing about flax, but was anxious to learn, and realizing, as few reporters do, that personal knowledge of the plant, its culture, products and markets were necessary before he could write intelligently, he set about obtaining the information in a practical way.

He therefore devoted a part of his garden to flax, sowing seeds from different localities, at different times and watching carefully the growth of the plant, maturing of the seed and the results until he became perfectly familiar with many of the peculiar features of the plant.

He gave the same attention to the manufactured products, to ways of handling the crop and to the principal markets until he became very familiar with all the details of the business, so much so that those who knew him best, came to recognize him as one of the best posted men in the business, and his letters were always carefully read.

Mr. Parlin always aimed to tell the truth about conditions in the markets or trade, no matter whose toes were trampled on. He was as near impartial as any man I ever knew, and he always investigated disputed points carefully. He expected criticism, and when it came he took it like a philosopher without allowing it to change his opinion, if, on investigation he found that his position was right.

I very much regret that the Reporter and the trade has lost such a valuable and useful correspondent, for men of his class are rare, and it will be difficult to fill the vacancy caused by his death.

Linseed oil manufacturers and consumers will miss Mr. Parlin, for he was diligent in the collection of facts and never drew unwarranted conclusions and seldom did he make a mistake in his estimates of future conditions or results of the crop. Having no personal interest in the crop or its products, and being strictly honest in his opinions, he was able to present his subjects without bias, thus giving his letters peculiar value to all interested parties. His letter of July 9 is worth reading several times, for it is a review of the situation after he had evidently considered conditions very carefully.

I hope you will be as fortunate in your selection of Mr. Parlin's successor.

T. G. McCulloh.

MISCELLANEOUS.

Milk Albumen Free of Duty.

The Board on Classification of the United States General Appraisers has sustained the protest of the Armstrong Cork Co., of Pittsburgh, Pa., in which it was claimed certain albumen is entitled to free entry. The merchandise was classified by the Collector for duty at the rate of 25 per cent. ad valorem, under paragraph 3 of the Tariff Act, as a chemical compound. General Appraiser I. F. Fischer, in his opinion for the Board, held the goods to be free of duty, under paragraph 468, as albumen, not specifically provided for, the decision following that of the Circuit Court, in which it was held that, although the article is not an albumen in the language of chemists, it is ordinarily an albumen, and therefore entitled to free entry.

Awards for Treasury Department Supplies.

The following awards have been made for annual supplies for the Treasury Department:—

Bidder 1. Mackall Bros.
3. Woodward & Lothrop.
4. Shoemaker & Busch.
6. James B. Lambie.
8. Blum Bros.
10. Rudolph, West & Co.
12. R. P. Clarke Co.
13. J. C. Ergood Co.
14. Geo. F. Muth Co.
15. O. B. Jenkins.
16. J. P. Nawrath.
20. Armour & Co.
21. Disinfecting Co.
28. Finola Mfg. Co.

Item 1. Acid, acetic, No. 8, 3¾c. per b., bidder 1.
2. 7,000 lbs. do. sulphuric, 1½c., do.
3. 10 lbs. alum, powdered, 2c., do.
4. Do. lump, 2¼c. per lb., do.
11. 20 lbs. beeswax, 18c., bidder 6.
12. 25 lbs. borax, powdered, 8½c., bidder 1.
27. 200 lbs. camphor gum, best quality, 56¾c., bidder 4.
28. 36 lbs. candles, best paraffin wax, 6's., 12½c., bidder 13.
29. 100 lbs. do. adamantine, 6's., 40-lb. boxes, 11½c., do.
32. 10 doz. chamois skins, about 20x33 in. each, $8.40 and $3.15, bidders 5 and 14.
34. 10 doz. concentrated lye, 50c., bidder 14.
38. 50 lbs. copper, sulphate, 6c., bidder 10.
43. 150 lbs. compound grease, hard, 10¾c., bidder 6.
44. 100 lbs. do. soft, 10¾c., do.
48. Disinfectant, 75c., bidder 15.
62. Matches, 200 to box, $1.47 per gro. boxes, bidder 4.
72. 10 doz. bots. oil, clock, for typewriters, 35c., bidder 14.
74. 1 cask, 700 lbs. potash, 4½c. per lb., bidder 14.
79. Pomade, putz, No. 12, 89c. per doz. boxes, bidder 8.
83. 300 doz. pkgs., Sapolio, 39c. per doz., bidder 8.
84. 25 doz. pkgs. do. ¼ lb. ea., 74¾c., bidder 4.
92. Soda, washing, in pkgs., 37½c. per doz., bidder 4.
93. 1,000 pkgs. soap powder, 3c. per doz. pkgs., bidder 28.
95. 2,000 pkgs. soap, bar, in 60-lb. boxes, 4c., bidder 20.
96. 300 lbs. soap, resin, long bars, 4½c., bidder 15.
97. 4 doz. soap, sand, dry cakes, 47c., bidder 8.
98. 100 lbs. soap, castile, white, ¼lb. cakes, 36c. per doz., bidder 4.
99. 100 doz. cakes soap, toilet, 84c. and $1.05, bidder 12.
100. 100 doz. cakes do., $2.40 and $1.58, bidder 1.
101. 100 doz. cakes do., 72c. and 80c., do.
102. 100 doz. cakes do., 83c., bidder 3.
103. 100 doz. cakes do., 75c., bidder 21.
104. 100 doz. cakes do., 60c., bidder 20.
108. 10 lbs. sponge, large, $1.38, bidder 16.
109. 50 lbs. do. small, 88c., do.
134. Witch hazel, Pond's extract, 59c. per gal., bidder 4.

New Corporations.

The Essex Gelatine Co. at Jersey City, N. J., to manufacture gelatine. Capital, $100,000. Incorporators, Louis B. Dailey, W. N. Akers, K. K. McLaren.

The Sinis Tonic Co. at New York, to manufacture medicines. Capital, $15,000. Incorporators, Elbridge B. Sinis, Edw. B. Perley, Roy H. Bent, all Antwerp, N. Y.

The Eastern Glass & Manufacturing Co. at Trenton, N. J. Capital, $1,200,000. Incorporators, Louis B. Daily, Warren N. Akers and K. K. McLaren, all of Jersey City.

The American Tincturate Co. at New York, to manufacture drugs, etc. Capital, $1,200. Incorporators, Frederick W. Brown, Wm. W. Foster, Hubert M. S. King, all of New York city.

The Astra Cement Co. at Hoboken, N. J., to manufacture cement. Capital, $200,000. Incorporators, Gustave E. Walter, Gustave Cameron, Richard A. Dawson, Walter C. Lou, all Hoboken, N. J.

The Eastern Glass & Manufacturing Co. at Jersey City, N. J., to manufacture glass. Capital, $1,250,000. Incorporators, Louis B. Dailey, Warren N. Akers, K. K. McLaren, all Jersey City, N. J.

The American Chemical Manufacturing Co. at Jersey City, N. J., to manufacture chemicals. Capital, $250,000. Incorporators, Horace C. Swan, Samuel H. Mills and Robert Unger, all of Jersey City, N. J.

The Wiggins Liquid Salol Co. at Buffalo, N. Y., to manufacture chemicals. Capital, $40,000. Incorporators, Clarence S. Wiggins and Frederick C. Wiggins, Rochester, N. Y., and Harrison Osborne, Buffalo, N. Y.

The Edward J. Knapp Candle Co. at New York, to manufacture candles, etc. Capital, $25,000. Incorporators, Edw. J. Knapp, Syracuse, N. Y.; Valentine E. Maurer, Syracuse, N. Y.; Frank A. Sutler, Chittenango, N. Y.

(Special Correspondence to the Reporter.)

Standards of Purity.

Washington, July 17, 1903.

The Committee on Food Standards, appointed by the Secretary of Agriculture under the authority of the last annual appropriation bill, has compiled a schedule of tentative definitions and standards for certain food products, which the department desires to submit to the manufacturers of these articles in all parts of the country, with a view of obtaining criticisms and suggestions as to the practicability of these schedules before they are finally promulgated as official definitions and standards. The special provision of law under which the committee is working authorizes the Secretary, "in collaboration with the Association of Official Agricultural Chemists, and such other experts as he may deem necessary, to establish standards of purity for food products and to determine what are regarded as adulterations therein, for the guidance of the officials of the various States and of the courts of justice."

The use to which the official standards will be put will be much more extensive than is indicated by the extract from the statute above quoted. They will be employed not only as guidance in court proceedings arising under pure food laws, but also to determine the purity and wholesomeness of food products imported into the United States under the law affecting imported foods and drugs, and in addition they will be used as standards to determine whether food products manufactured for export, and designed to be shipped with official certificates of inspection, are of the quality to entitle them to admission into those foreign countries which have restrictions upon the importation of impure or unwholesome food stuffs.

Following are those food definitions and standards, as prepared by the committee, that are of special interest to the readers of the Reporter:—

LARD.

Definitions.—1. Lard is the rendered fresh fat from slaughered, healthy hogs.

2. Leaf lard is the lard rendered in open kettles at moderately high temperatures from the internal fat of the abdomen of the hog, excluding that adherent to the intestines.

Standard.—Standard lard and standard leaf lard are lards containing not more than one (1) per cent. of substances not fat, necessarily incorporated therewith in the process of rendering.

Definition.—3. Neutral lard is the lard rendered at low temperatures from the internal fat of the abdomen of the hog.

GLUCOSE PRODUCTS.

Definition.—1. Starch sugar or grape sugar is the solid product obtained by hydrolyzing starch or a starch-containing substance until the greater part of the starch is converted into dextrose. Starch sugar or grape sugar appears in commerce in two forms, anhydrous and hydrous. In the former, the sugar is crystallized with water of crystallization; in the latter, it is crystallized with water of crystallization. The hydrous varieties are commonly known as 70 and 80 sugars; 70 sugar is also known as brewers' sugar, and 80 sugar as climax or acne sugar.

Standards.—(a) Standard 70 sugar or brewers' sugar is hydrous starch sugar containing not less than seventy (70) per cent. of dextrose and not more than six-tenths (0.6) per cent. of ash.

(b) standard 80 sugar, climax or acne sugar, is hydrous starch sugar containing not less than eighty (80) per cent. of dextrose and not more than one and one-half (1.5) per cent. of ash.

(c) Standard anhydrous grape sugar is anhydrous grape sugar containing not less than ninety-six (96) per cent. of dextrose without water of crystallization and not more than six-tenths (0.6) per cent. of ash.

The ash of these standard products consists almost entirely of chlorids and sulphates of lime or soda. The standard products are free from deleterious substances.

Definition.—2. Glucose, mixers' glucose, confectioners' glucose, or corn syrup is a thick syrup substance obtained by incompletely hydrolizing starch or a starch-containing substance, decolorizing and evaporating the product. It is found in various degrees of concentration, ranging from forty-one (41) to forty-five (45) degrees Baume.

Standard.—Standard glucose, mixers' glucose, confectioners' glucose, or corn syrup is colorless glucose, varying in density between forty-one (41) and forty-five (45) degrees Baume, at a temperature of one hundred (100) degreees F. (37.7 C.). It conforms in density, within these limits, to the degree Baume it is claimed to show, and for a density of forty-one (41) degrees Baume contains not more than twenty-one (21) per cent. of water, and for a density of forty-five (45) degrees not more than fourteen (14) per cent. It contains not more than one (1) per cent. of ash, consisting chiefly of chlorides and sulphates of lime or soda.

CLOVES.

Definition.—Cloves are the dried flower buds of Jambosa caryophyllus Ndz (Caryophyllus aromaticus L.) which contain not more than five (5) per cent of clove stems.

Standard.—Standard cloves are cloves containing not less than ten (10) per cent. of volatile ether; not less than twelve (12) per cent. of quercitannic acid; not more than eight (8) per cent. of total ash; not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than ten (10) per cent. of crude fiber.

Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry of the Department of Agriculture, will be glad to receive criticisms or suggestions concerning the above standards, and requests that all communications be forwarded as promptly as possible, in order to expedite the promulgation of the permanent official standards soon to be approved by the Secretary of Agriculture.

(Special Correspondence to the Reporter.)

Regulating the Sale of Indian Petroleum Lands.

Washington, July 17, 1903.

As a result of a thorough investigation of charges to the effect that unscrupulous persons have sought to take advantage of the opportunity to buy the oil and gas lands of the Creek Indians in the Indian Territory at nominal prices, the Secretary of the Interior has framed a new series of regulations providing for the appraisal of the lands and their sale to the highest biddder, which, it is believed, will not only insure the Indians fair prices for their lands, but will prevent any single interest from acquiring unreasonably large holdings by purchase or lease.

At the beginning of the investigation, reports were current of corruption and collusion on the part of the officials of the land office in the Indian Territory, as a result of which recommendations were forwarded to the Department looking to the acceptance by the Indians of nominal prices for large tracts of especially desirable land, but these reports have been found to be without any foundation. It has been discovered, however, that the Indians in many cases have bargained to sell their lands at very low prices, in many cases only a fraction of their real value, but these sales have not been consummated, as the law requires that no deed shall be valid until it receives the

PAN-AMERICAN EXPOSITION
GOLD MEDAL Awarded to
KEYSTONE GELATINE
SEND FOR SAMPLES AND PRICES.
Manufactured by MICHIGAN CARBON WORKS, Detroit
AMERICAN GLUE CO., Selling Agents, 415 Atlantic Ave., Boston.

approval of the Secretary of the Interior.

With a view to insuring to the Indians a fair price for their lands, and to prevent the monopolizing of those tracts known to contain more or less oil and gas, the Secretary has prepared a series of special regulations, describing the process to be followed, and limiting the area of lands which may be leased by the Indians for the production of oil, gas, or asphalt to 4,800 acres to each person or corporation. These new regulations, so far as they relate to sales of oil lands, are as follows:—

"Creek citizens desiring to sell such of their lands as they are by law authorized to sell with the approval of the Secretary of the Interior, may apply to the Indian agent or other officer in charge at the Union Agency, Muskogee, Indian Territory, by petition, in duplicate, containing an accurate description of the land and improvements thereon, praying that such land may be sold in accordance with these regulations, stating facts to show title, and why it will be for the best interest of the owner to sell it for a fair price, and signed by all persons or their legal representatives having any interest in the land. A form of petition has been prescribed which must be used.

"When such Indian agent or other officer in charge shall be satisfied that the facts alleged in the petition are sufficient, he shall cause a memorandum record of the same to be made in a book kept for that purpose, and shall file the petition in his office. The duplicate copy of such petition shall be immediately forwarded to the Commissioner of Indian Affairs by such agent or other officer in charge, who, before so forwarding it, shall indorse thereon the date the same was received by him and the date the land described therein will be listed for sale.

"Such agent or other officer in charge shall on each Monday morning post in a conspicuous place in his office, in such large letters and figures as shall be clearly legible, for a period of sixty days, a list of the lands described in petitions received by him during the week preceding such Monday, showing in separate columns the names of the owners, the description of the lands, the dates when listed, and the dates when the bids will be opened, and such list shall be accessible to the public at all times in the business hours of the office. On each Monday the Indian agent or other officer in charge will forward to the Commissioner of Indian Affairs a complete list of all lands posted in his office for sale.

"When any tract of land has been listed, the Indian agent or other officer in charge, when competent from his general knowledge of the value of the land, shall visit, view and appraise the same at its true value, according to his best judgment. If such agent or other officer is not so competent, or if it shall be impracticable for him to personally visit and appraise the land, he shall require the appraisement to be made in like manner by a competent officer or employe under his charge. A certificate of said appraisement, signed and sworn to by the person making it, shall be sealed and not opened until the sealed bids for that tract of land are opened. The appraisement shall not be made public, but no bid less than the appraised value shall be considered. If the appraisement is made by other than the agent or officer in charge such agent or officer in charge shall add his certification of the qualifications and integrity of the appraiser, and that he believes the appraisement to be the true value of the land.

"Sealed bids will be received by such agent or other officer in charge of his office, for any lands so listed, at any time before the day on which the bids are opened. If a bidder desires to bid on tracts not contiguous he must submit a separate bid for each tract, and if he desires to purchase less than an entire tract offered he may submit a bid for one or more legal subdivisions thereof.

"All such bids shall be inclosed in a sealed envelope, upon which must be written 'Bid for Creek land, described as follows,' followed by a description of the land, before the same is deposited with the Indian agent or other officer in charge. Bids shall be numbered by such Indian agent or other officer in charge in the order in which the same shall be received by him, and a memorandum record of each, containing number of bid and description of land, shall be kept in a book suitable for that purpose. Each bid must be accompanied by a duly certified check on some solvent bank, payable to the Commissioner of Indian Affairs, for the use of the grantors, for 20 per cent. of the amount offered, as a guarantee for the faithful performance by the bidder of his proposition. If the bid shall be accepted and the successful bidder shall, within a reasonable time, not exceeding ten days, after due notice, fail to comply with the terms of his bid, such check shall be forfeited to the use of the owner of the land.

"The right to reject any or all bids is reserved, but in all cases the highest bid shall be accepted by such Indian agent or other officer in charge, and such acceptance shall be subject to the approval of the owner of the land.

"The Commissioner of Indian Affairs shall cause an advertisement of lands listed to be published in at least one weekly newspaper published at Muskogee, Indian Territory, and such additional weekly newspapers as he may deem advisable, so that each tract listed shall, as nearly as may be practicable, be advertised during the listed period.

"The advertisement shall contain a description of the land as listed and shall state that sealed bids will be received therefor at the agency until the day when bids are to be opened, which day shall be clearly specified, and that such sealed bids must be accompanied by and contain a duly certified check on some solvent bank, payable to the order of the Commissioner of Indian Affairs, for 20 per cent. of the amount of the bid, and that further information and a copy of rules and regulations applicable may be had at the Union Agency.

"In addition to such advertisement the Commissioner of Indian Affairs shall cause public notice to be given by publication in a newspaper published at Muskogee, that rules and regulations and any other information relative to sale of Creek lands may be obtained on application to the Indian agent, Union Agency, Muskogee, Indian Territory, and such publication shall continue until otherwise ordered by the Commissioner of Indian Affairs.

"The deed must be executed in the presence of two subscribing witnesses and duly acknowledged before the Indian agent at Union Agency, a notary public, or other officer duly authorized to take acknowledgements of deeds. The witness must make affidavit that the deed was in their presence read and fully explained to the grantor, and that he understood the nature, contents and effect, thereof, and approved and signed the same in their presence.

"Such deed when transmitted by the Indian agent, or other officer in charge, for the Secretary's approval, must be accompanied by the original petition; the certificate of appraisement; all bids relating to the land covered by such deed; a duly certified check on a solvent bank for the full purchase price, payable to the order of the Commissioner of Indian Affairs; and a full report by the Indian agent or other officer in charge of all proceedings prevlous to the execution of the deed, also—

"By the certificate of the Indian agent, or other officer before whom the deed was acknowledged, that the contents, purport, and effect of the deed were explained to and fully understood by the grantor or grantors, that the consideration specified in the deed is a fair price for the land; that the conveyance is in every respect free from fraud or deception; and that the land described in the deed is no part of the grantor's homestead. The affidavits of the grantor or grantors, and the grantee or grantees, must accompany such deed, showing that there is no contract, agreement, or understanding (written or verbal), whereby the consideration money or price paid for the land, or any portion thereof, is to be refunded to the purchaser of the deed; nor any live stock, implements, other articles or things are to be exchanged or taken in lieu of said consideration or purchase price, or any portion thereof, for said lands. The deed must also be accompanied by an affidavit of the grantee (or grantees), stating that he (she or they) is not a party to any association or combination of persons to acquire the land described in the deed at less than its fair value, or to prevent open and fair competition in the purchase thereof, and that neither the grantor, nor anyone acting for him in his place, has been given or promised any money or other thing by the grantee, or by anyone with his advice, consent, or knowledge, except the consideration named in the deed, to induce him to agree to such sale of his land.

"When the deed has been returned to the Indian agent, duly approved by the Secretary of the Interior, it shall be accompanied by the certified check for the purchase price duly indorsed, with appropriate instructions from the Commissioner of Indian Affairs to the Indian agent relative to the delivery of the deed to the grantee and the payment of the purchase price to the grantor. The Indian agent in reporting on deeds will be careful to show the value of the land, as appraised by the Commission to the Five Civilized Tribes, in order that the department may know how it was classified for distribution. He will ascertain whether the party or parties seeking to sell are the parties to whom the land was alloted, and will give his opinion as to whether the instrument should be approved, with his reasons for such opinion."

RESTRICTIONS ON LEASES.

Certain important restrictions upon the leasing of lands have been incorporated in the new regulations, substantially as follows:—

"Each application will be required to state that the application is not made for speculation, but in good faith, and where the lease is for mining purposes, for mining the mineral or minerals specified, including oil and natural gas. A map must accompany each application, therein showing the amount of land of each legal subdivision supposed to be underlaid with mineral, oil, or natural gas, as the case may be, and if mineral other than oil or natural gas, the quantity that can probably be mined. Applicants must furnish such other information as may be desired by the agent regarding their prospective operations. Applications by parties who do not themselves intend to conduct operations on the land will be rejected. Should the application be approved, bond will then be required as provided for hereinafter.

"No person or corporation will be allowed to lease, within the territory occupied by the Creek and Cherokee Nations, for the purpose of mining for oil and gas, more than 4,800 acres of land in the aggregate.

"Any oil and gas leases presented to the department must be accompanied by an application by the lessee, for approval of such lease or leases, in the form of an affidavit, showing that the lessee is not directly or indirectly interested in any oil and gas leases or application for such leases, within the territory occupied by said nations, the lands embraced in which, with the tracts covered by the lease or leases presented for approval, would make more than 4,800 acres."

"No lease or deed will be approved that is executed prior to the approval and delivery of the deed to the allottee. All deeds and leases will be transmitted by the Indian agent, or other officer in charge, through the proper channels for the Secretary's approval."

The Art of Sampling Rosins.

One of the most remunerative callings in Savannah is that of naval stores inspecting. There are few men who are so well paid for their labor as the men who gauge spirits of turpentine and grade rosins. There may be no great fortune in the work, but those engaged in it manage to get along pretty well, and the wolf does not linger about their doorsteps and cast hungry looks through the window. The calling is a fascinating one, and those engaged in the work seem to have a pleasing way of making a comfortable living.

It is not everyone who can inspect naval stores. It requires special ability in that direction and some experience. Those who are in the business now have for the most part been engaged in it for some time ,and they have the work down to a fine point of excellence. With the important position occupied by Savannah as a naval stores centre a description of the work of the inspectors and the method employed to arrive at the proper grade of thousands of barrels of rosin and the correct gauge is interesting.

The grading of rosin is an interesting process. The gauging of spirits is not so picturesque. In this work the government method of gauging liquids is used, and that is all there is to it. With rosin it is different.

From the time a barrel of rosin is placed upon the wharf until it goes aboard ship to be exported, it passes through many hands, but more depends upon the man who declares what it shall grade than anyone else.

The inspector goes in among, say, 1,500 or 1,800 barrels of rosin, scattered over a wide territory on a wharf. To inspect 1,800 barrels a day is considered fair work, but some inspectors have passed 2,600 in one day's time. That, however, is the exception.

With the inspector go two or three gangs of men and young boys. There is one gang to "uncooper" or unhead the barrels. When this is done a piece of rosin at least six inches square is cut from the contents of the barrel. This is handed to the young man who cuts out the samples. This is where the fine art of rosin sampling comes in. This sample cutter is an artist. He uses a sharp adze, and, taking the large piece of rosin of irregular shape in his left hand, he taps it gently with the sharp blade of the adze. This is done on four sides, and soon the rosin block begins to take shape. The chipping away of the rosin is kept up until a perfectly square block just a little short of an inch is produced.

This is the rosin sample that is to be passed upon by the inspector. Hundreds of them can be cut with great rapidity, and when they are laid out together there will not be a difference of a sixteenth of an inch in their size. The same is placed on the side of the barrel and the inspector comes by. Here is where his keen eye and his good judgment come into play. He carries with him a complete set of samples of the various grades of rosin. There are thirteen of them. The palest rosins are the most valuable, and as they get darker in hue they become less valuable. The newly cut sample is held to the light beside the sample, and the inspector calls out the grade. It is put on record by an assistant, and the inspector passes on to the next barrel, from which a large piece of rosin has been cut and the sample made from it. He grades this, and goes on to another barrel. This is kept up until every barrel has been opened and sampled.

Behind the inspector comes a man who coopers up the barrels of graded rosin, and another man weighs them and marks the weight on the side of the barrels.

A record of the inspections is kept, and this record goes to the factor.

This inspector is paid 6c. a barrel for inspecting the rosin by the factor by whom he is employed. The railroad upon whose wharf the rosin is placed pays a quarter of a cent a barrel for the inspection. This makes the total cost of the inspection 6¼c. a barrel. The inspector has to pay all his helpers, and this amounts to a good deal. One inspector says his expenses amount to from $600 to $700 per month, while there are others who even pay out more than that.

The inspector, after being elected to his office by council, has to make arrangements with the factors for employment. The work is divided about equally among the several inspectors. Some of them work for one firm alone, while others are employed by two or three factors.

While the factor pays the inspector for the work that is done he charges the producer with the cost of inspection, and the man who ships the spirits or rosin has finally to pay for having it gauged or inspected at the port.

The rosin samples are brought from New York to Savannah. These are the original types by which all the inspections must be gauged. They cost $2.40 a set, and the sets have to be renewed about once each year. They formerly cost $5 a set, but the price has been reduced. The types after reaching Savannah, are approved by the inspecting committee of the Savannah Board of Trade, and they can be used for grading the rosin sent here to be inspected and sold.

After being elected by council, a naval stores inspector has to give a bond of $2,000 that he will conscientiously perform his duties.—Savannah Press.

Reappraisements of Importations.

The following reappraisements of merchandise has been made by the Classification Board of the United States General Appraisers since our last report:—

Chemical compound and medicinal preparations, from Chemische Fabrik Von Heyden, Radebeul, March 27 to May 19, 1903; Guaiacol absolute, liquid, ent. at 12, adv. to 13.30 marks per kilo. Add demijohns and cases. Less freight Radebeul to Hamburg.

Medicinal preparation, from Friedr. Bayer & Co., Elberfeld, March 10 to May 24, 1903: Creosotal, ent. at 14, adv. to 28.50 marks per kilo; duotal, ent. at 29, adv. to 90.25 marks per kilo; do., ent. at 32.75, adv. to 90.25 marks per kilo. Bottles, boxes and cases included.

Comparative Stocks of Lard.

The Cincinnati Price Current submits the following comparisons of stocks of lard on July 1 for the years mentioned, held in Chicago and New York, and reported in European markets and afloat, with totals, represented in tierces:—

	Chicago.	New York.	Europe, etc.	Total.
1883	115,200	22,900	78,300	216,400
1884	128,900	37,900	91,100	275,900
1885	100,600	40,800	102,500	243,900
1886	138,700	36,400	94,500	269,600
1887	118,800	25,400	103,200	247,400
1888	61,100	14,900	61,100	139,100
1889	66,000	22,600	72,100	160,700
1890	104,700	34,400	131,000	270,100
1891	176,300	65,900	254,000	496,200
1892	61,200	18,700	138,000	237,900
1893	38,800	8,500	84,000	131,800
1894	28,400	11,500	109,000	153,900
1895	99,600	18,600	171,000	289,200
1896	277,100	25,900	254,500	557,500
1897	291,700	19,400	255,000	566,100
1898	181,800	15,400	186,000	383,200
1899	210,400	14,300	171,000	395,700
1900	138,000	10,000	125,000	273,000
1901	55,700	11,300	108,000	175,000
1902	60,800	10,100	99,300	170,200
1903	57,300	8,700	118,000	184,000

The above shows visible stocks of lard this season to be 14,000 tierces more than a year ago, and 99,000 less than the average for July 1 for twenty years previous to this season. Compared with a month ago, there is an increase of 43,000 tierces.

The aggregate stocks of lard, as mentioned the first of each month for years stated, compare as follows, represented in tierces:—

	1903.	1902.	1901.	1900.	1899.
Jan	105,000	163,000	159,000	264,000	276,000
Feb	145,000	179,000	168,000	265,000	327,000
Mar	138,000	198,000	175,000	263,000	339,000
April	120,000	200,000	159,000	250,000	348,000
May	133,000	157,000	137,000	236,000	338,000
June	147,000	151,000	149,000	240,000	358,000
July	184,000	170,000	175,000	273,000	395,000
Aug	....	156,000	192,000	257,000	426,000
Sept	....	130,000	182,000	233,000	398,000
Oct	....	114,000	136,000	187,000	366,000
Nov	....	72,000	126,000	110,000	316,000
Dec	....	80,000	115,000	123,000	248,000

ALGONQUIN RED
is the best paint on earth. It is a natural paint, made by natural means. It is not a product of fire. It contains no acid, lime, nor gypsum. The basis of it is unfading red slate rock. Put up in dry, paste and ready-mixed orm. Write for prices and printed matter.
Algonquin Red Slate Co., 10 East Worcester Street, Worcester, Mass., Manufacturers of Red and other colors of Paint.

Manganese Resinate Gum
SOLUBLE IN COLD NAPHTHA OR TURPENTINE.
Makes the Best of Paint Dryers
O. J. FERRIS,
Hamilton Co., Plainville, O.

KENDALL & FLICK
MANGANESE
WASHINGTON, D. C.

KENDALL & FLICK
MANGANESE
WASHINGTON, D. C.

PAINT MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 30.

Saturday Evening, July 18, 1903.

The market for dry colors remained quiet, but firm, without any quotable change in prices. In some colors a slight improvement in the consumptive demand was noted, but transactions on the whole were of a moderate volume and the usual midsummer dullness was apparent. There was an unusual decided improvement in the demand for lead products, and orders were principally for fall delivery. Grinders who shut down showed a marked disposition to stock up, which is much earlier than usual. Labor troubles, according to general expectations, will come to an end in the near future, when a decided increase in the demand will take place, as a result of building having been practically restricted since the early spring.

White Lead, Zincs, Etc.

WHITE LEAD.—While there are rumors around the trade of a possible change in prices in the near future, as yet nothing definite has been done. Possibly this rumor arises from the fact that all lines of trade as well as the stock market has been very much demoralized of late, and a wave of depression and lower values seems to be sweeping over the country. At the same time the consuming capacity of this country is on the increase, and will undoubtedly be reflected in an increased demand for paints later on. So far this month trade in the lead products has been unsually good for this period of the year. While many of the grinders are shut down for the usual Summer clean up, will soon start up as orders have come in earlier than usual for the fall trade. Not only in this section, but at the West. This indicates an early settlement of labor troubles, and a large demand this fall for the lead products. Dry lead is in better stock, as corroders have been enabled to catch up with their deliveries. Additional sales of car lots to regular deliveries are reported at 5½@5¾c., as to make, quantity and terms of sale. As stated above the demand for lead in oil in a jobbing way has been unusually good for special brands of old process at 6¾c. and upward, as to quantity and terms of sale, and from ¼c. to ½c. less for quick process, as to buyer and terms of sale. Foreign makes of lead in oil remain quiet, but steady at 9⅜c. for special brands and 7⅜c. and up for other makes, as to quantity and terms of sale.

RED LEAD.—There is a fair jobbing trade for prompt, with additional sales to regular contract deliveries, as yet no change in values has been made which range from 6¾c. and upward for old process and a shade less for quick process, as to quantity and terms of sale. German is rather quiet, but steady at 6⅝c. for ordinary and 7½c. and upward for extra grades, as to quantity, but for a round lot a shade less might be done. English is dull at 6¾c. up to 8¾c., as to grade and quantity.

LITHARGE.—The usual contract deliveries to those consumers who are running their works are reported. Some of the plants that have been closed down are getting ready to start up, which is earlier than usual, all of which gives more tone to the market. Prices are fairly steady at 5¼c. up to 6¼c. for old process, as to grade, quantity and terms of sale.

ORANGE MINERAL.—French is jobbing at 11¼c. from dock and 11¼c. and up for store lots of special brands, as to packing and other makes at 10¾c. and up, as to quantity, but for a round lot possibly a shade less might be done. German is in better request for fall delivery at prices ranging from 8¾c. up to 9¼c., according to grade, quantity and seller. English is without special feature and is nominal at 8¼c. and upward, as to grade and seller. Domestic is in light stock in excess of regular deliveries and prices are held firm at 8¼c. and up, as to quantity, less the usual discount terms.

PIG LEAD.—Owing to the strikes at the mines the St. Louis market has been active, especially for spot stocks, sales of which have been made at 4.00c., up to 4.05@4.07½c., closing with later price bid for further lots. Buyers are anticipating an advance in prices, at this point trade has been slow at 4.12½c. for common and 4.22½c. for refined. London market has been firmer at £11 8s. 9d. for soft Spanish.

ZINCS.—There has been an increased demand for spot goods, as many of the grinders, both here and at the West who were shut down, have started up again on their fall orders. There have been further sales for export, all of which gives an active tone to the market. Prices remain steady at 4⅝@4¾c., as to grade, quantity and terms of sale for the various brands of the New Jersey make.

Dry Colors.

REDS.

The movement in venetian red showed a slight improvement, and prices remained firm in sympathy with favorable reports from primary markets. Vermilions were steady in tone and sales were of a moderate volume at full prices. Carmine was firmly held in sympathy with a strong market for cochineal due to the scarcity of supply of the latter. Holders named $2.25@2.50 for No. 40, according to quality and terms of sale.

BLACKS.

Trade was moderately active and a fair business in parcels, which went directly into consumption was done. Prices remained stationary and no improvement in the market is looked for, owing to the continued sharp competition, particularly in carbon. Transactions in lampblack were mostly in small lots at previous prices on the basis of 4½@6c. for commercial, according to quality and terms of sale. Some export business in carbon at private terms was effected.

BROWNS.

No change in the market for umbers and siennas was noted and prices were steady in tone. The demand was moderate and producers here as well as importers were not inclined to make any concessions in prices. Italian was quoted on the basis of 3@6½c. for burnt and powdered, according to quality and terms of sale. Umbers were held on the basis of 2½@3½c. for burnt and powdered Turkey. Other grades were unchanged.

BLUES.

Prices remained steady and manufacturers reported a fair movement on orders previously booked. Prussian was held at prices ranging from 27@30c., according to quality and terms of sale. Other kinds were steady without quotable change.

GREENS.

The movement in paris green continued to be rather slow and not up to general expectations. Holders continued to ask 11½@13c. for supplies in bulk, but it was intimated that bids on sizeable lots a shade under the inside range of quoted prices would have probably led to business. In other grades the movement was light, but sales were of a fair volume for this time of the year and prices were firmly maintained.

YELLOWS.

The demand for chrome yellow was fully up to the average for this time of the year and prices were firmly maintained by manufacturers. In ochers a slight improvement in the demand was noted, particularly for French kinds. Some transactions in the latter color, for import, were made at full prices. Domestic was firm in sympathy with favorable reports from primary markets abroad. Prices were firm and unchanged.

Mixed Paints and Colors in Oil.

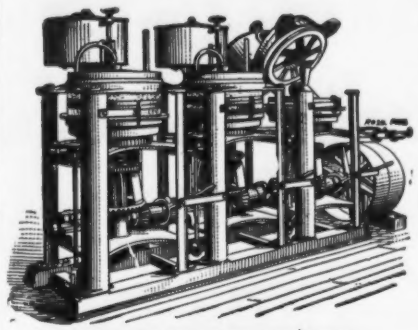
The demand showed no marked improvement, but in some instances manufacturers reported a better inquiry, particularly from out-of-town points. Prices were firm and there was no disposition shown on the part of manufacturers to sell goods below quotations.

Metallic Paints.

Manufacturers reported that orders received showed a slight increase during the past week, and that the business transacted was principally with out-of-town points. Locally the consumption continued to drag. Prices ruled firm at $19@21 for brown and $16@20 for red, according to terms of sale.

NEW DESIGNS

MILLS and MIXERS



GANG OF WATER COOLED FINE COLOR MILLS

For Grinding and Mixing all Materials.

Factories Fitted Up Complete and Ready for Work.

CHAS. ROSS & SON CO.

MANUFACTURERS,

16, 18 & 20 STEUBEN ST.

BROOKLYN, N. Y.

Twenty Minutes from New York City Hall, via Bridge and Flushing Avenue Cars

THREE BLIND MEN

Investigated an elephant. One, seizing its tail, declared the animal very much like a paint brush; the second, grasping the trunk, insisted that the elephant closely resembles a snake; the last, clasping one of the beast's legs, maintained that an elephant is surely like a tree. This fable teaches the impossibility of deciding facts on partial evidence. In paint making the only adequate evidence is practical examination and personal experience.

Standard Zinc Lead White

To the paint maker who has not used it, is one thing—to those that daily utilize it (and this list comprises the leaders in the trade) it is a different proposition. To them it means economy and improvement. While it was unobtainable they missed it sorely; now that shipments are about to be resumed (about July 15th) they are gratified. Until you know it as they know it you are as one of the blind men who familiarized themselves with the elephant.

NOTE.—Both process and pigment are protected by letters patent, and any infringement by manufacture or use will be rigidly prosecuted.

∴THE∴

United States Smelting Co.

CANON CITY, COLO.

Owned and Operated by

THE UNITED STATES REDUCTION AND REFINING CO. CAPITAL TEN MILLION DOLLARS.

E. H. HAINES, Sole Agent for the Eastern and Middle States and Canada.

1401 Ashland Block, Chicago, Ill.

THE GEO. F. EBERHARD CO., Pacific Coast Sales Agents, 12-14 Drumm St., San Francisco, Ca

Shipments made from Canon City, Chicago or San Francisco.

FLUOR SPAR Highest Grades Lump and Ground

Lump Chalk in cargo or part cargo lots.

CHARLES EARL CURRIE & CO.

General Millers and Exporters. LOUISVILLE, KY.

NORTH, EAST, SOUTH, WEST Goes THE OIL, PAINT AND DRUG REPORTER.

SELLING AGENT FOR CHICAGO, EDWARD KEIR, 39 River Street.

J. Lee Smith & Co.

59 FRANKFORT ST., and 19 21 & 23 JACOB ST., NEW YORK.

Agents for

Sisson Bros. & Co., Ltd.

Hull, England.

Manufacturers of Crown Paris White, Patent Dryer, Ochres, Drop Black and Colors.

Agents for

The Hull & Liverpool Red Oxide Co., Ltd.

St. Helens and Hull, England,

Manufacturers of Double and Triple Crown Venetian Oxide, "AAAA" and other Venetian Reds, Indian Reds, Oxides of Iron, Crocus, etc.

PAINTS FOR GRINDERS' USE

IMPORTERS OF

French and other Ochres, V. M. French Zinc, English B. B. White Lead, China Clay, Vandyke Brown, Talc, Etc.
Grinders of Turkey Umber, Italian Siennas, Golden Ochres, Bone Black, Etc.

Consumers should bear in mind that there are many brands of White Lead (so=called) which are claimed to be "just as good" or better than Pure White Lead, which con= tain little, if any, White Lead, but are simply mix= tures of Zinc, Whiting and Barytes, or other cheap, inferior materials.

Make sure that the brand is right. Those named in list are genuine.

ARMSTRONG & M'KELVY	Pitts-
BEYMER-BAUMAN	burgh
DAVIS-CHAMBERS	
FAHNESTOCK	
ANCHOR	Cincinnati
ECKSTEIN	
ATLANTIC	New York
BRADLEY	
BROOKLYN	
JEWETT	
ULSTER	
UNION	
SOUTHERN	Chicago
SHIPMAN	
COLLIER	St. Louis
MISSOURI	
RED SEAL	
SOUTHERN	
JOHN T. LEWIS & BROS. CO.	Philadelphia
MORLEY	Cleveland
SALEM	Salem, Mass.
CORNELL	Buffalo
KENTUCKY	Louisville

National Lead Company

100 William Street, NEW YORK.

CARBON BLACK

—MADE BY—

GODFREY L. CABOT,

82 Water Street, BOSTON, MASS, U. S. A.

N. B.—Carbon Black is also known as Hydrocarbon Black, American Gas Black, Satin Gloss Black, Jet Black, Silicate of Carbon, etc.

GRADES.—Eclipse, Elf, [S], Elf [G], Sunset, Banner, etc.

SHIPPING POINTS.—Saxonburg, Butler, Ridgway, Pa.; Creston, W. Va.

STOCKS carried in New York, Chicago, San Francisco, St. Louis, London, Paris, Hamburg, St. Petersburg, etc.

WRITE FOR SAMPLES AND PRICES.

CAWLEY, CLARK & CO.,

Manufacturers of

PULP AND DRY COLORS,

STRONGEST CHROME YELLOW IN THE MARKET.

Factory 272 to 280 Passaic Street, - - NEWARK, N. J.

BLACKS

High Grade Lamp Blacks, Carbon Gas Blacks.

DROP AND IVORY BLACKS, PLUMBAGO,

Coal Tar, Creosote Oil, Naphthalene, Anthracene, Pitch.

THE WEGELIN & WILCKES BLACK MFG. CO., 50 Cliff Street, New York.

SEAVER & CO., MANUFACTURERS OF

FINE IVORY AND DROP BLACK,

For The Trade and Grinders' Use.

LAMP AND CARBON BLACKS.

120 MILK STREET, - - BOSTON, MASS.

JOHN W. MASURY & SON,

MANUFACTURERS

Paints & Varnishes

NEW YORK and CHICAGO.

NON-FADING REDS

BRILLIANT, UNIFORM, STRONG.

MORRIS HERRMANN & CO.

68 WILLIAM STREET, NEW YORK CITY.

American Steel & Wire Co.

Chicago New York Denver San Francisco

COPPERAS

VENETIAN RED

OXIDES OF IRON

TRADEMARK FEROX REGISTERED JULY 6, 1909.

MOHAWK PAINT and CHEMICAL CO.

SOLE MANUFACTURERS OF

Patent Iron Oxide Paints. 98% Pure.

NORWICH, CONN.

The Ideal Pigment for Wood and Metals. The only adequate protection for Structural Iron and Steel Work for Buildings, Bridges, Ships, &c.

Send for Descriptive Circulars.

CARBON GAS BLACK
LAMP BLACK
IVORY BLACK
BONE BLACK
DROP BLACK
FRANKFORT BLACK

VINE BLACK
CHARCOAL
MINERAL BLACK
PHOTOGRAVURE
and PLATE BLACKS
Etc., Etc.

"REMEMBER,

we are accustomed to getting at the cause of Black troubles, and correcting them."

BINNEY & SMITH CO.

81-83 Fulton Street NEW YORK

C. K. WILLIAMS & CO.

EASTON, PA.

WE ARE MAKING A SPECIALTY OF A PARTICULAR HIGH GRADE

PERSIAN OXIDE, ITALIAN SIENNA, and a very BRIGHT STRONG **GRINDING OCHRE**

as well as various other **DRY COLORS.** Samples and Prices furnished upon application.

VARNISH

MANUFACTURED FOR THE TRADE.

PHILADELPHIA VARNISH CO.

Fourth and Porter Sts.,

P. O. Box 1546. PHILADELPHIA.

TRADE MARK.

A. W. Smith, Limited.

79 Duane Street, NEW YORK.

Sole Agents in U. S. and Canada for

G. SIEGLE & CO., G. m. b. H., STUTTGART.

Dry Colors

WRITE FOR SAMPLES AND PRICES.

CAPACITY **150** TONS DAILY.

CHINA CLAY. Equal to English Clay, Pulverized or Lump.

PHILADELPHIA CLAY MFG. CO.

New York Office, 150 Nassau Street,

706 Drexel Building, Philadelphia, Pa.

LAMP BLACKS

IN BULK AND PACKAGES

OF UNEQUALED QUALITY.

We make Lamp Black of every grade and quality and will cheerfully submit prices and samples. No connection with any combination.

BIHN & WOLFF CO.,

Established 1844. BRIDESBURG, PHILADELPHIA, PA.

Town and Country Ready Mixed Paints
(64 Beautiful Colors)

Exactly the same pigments are used in Harrisons' "Town and Country" Paints as in the Harrison Oil Colors, which are the American standard. That means clear, bright, permanent tones, and work that is an advertisement for years of the painter who did it, and of the good quality of the dealer's stock.

Anyone who uses or sells paints, varnishes or chemicals should read our free book "The Chemistry of Paint."

HARRISON BROS. & CO., INC., PHILADELPHIA.
CHICAGO, BOSTON, CINCINNATI, NEW ORLEANS, NEW YORK.

Miscellaneous.

BARYTES. — Nothing of interest transpired in the local market, and trade in a large way was slow, while the sales of jobbing and car lots were moderate. Absence of offerings of strictly white goods, due to supplies being nearly depleted, caused prices to hold very firm. Holders named $17@20, according to quality and terms of sale. In the other grades no quotable change in prices was effected and a general quiet dominated the market.

CHINA CLAY.—Under a steady jobbing demand the supply on the spot continued moderate and previous prices were fully maintained. Holders were not disposed to shade quotations of $11 and upward. A fair business was done in domestic and sales of jobbing lots at $8.50@10, according to quality and terms of sale, were made.

CHALK.—The market remained unchanged and prices were stationary at $3.25@3.50, according to terms of sale. The contracts of French chalk from the new quarry amounting to 2,500 tons, which are on the way and expected to arrive here the early part of August, were accepted only on approval of quality. It is intimated that prices paid for the above chalk ranged from about $2.50@2.75. Some sales of standard chalk for shipment at $3.50 were made recently. It is intimated that the stock here and parcels afloat held by manufacturers will cover their requirements in the near future.

FULLER'S EARTH.—The spot supply showed no accumulation and prices were steady in tone, holders naming 80c.@$1 for lump and powdered, according to terms of sale. Transactions were mostly in jobbing lots. Advices from primary markets noted general firmness and no indications for lower prices.

PUTTY.—The market was quiet but prices remained steady, manufacturers naming previous quotations on the basis of 1½c. and upward for supplies, in bulk, according to terms of sale. Some manufacturers intimated that inquiries were better, but transactions on the whole were moderate, but considered satisfactory for this time of the year.

PUMICE STONE.—Prices of spot parcels remained steady without change, and sales in the aggregate were of a fair volume. Advices received from Leghorn, under date of July 1, 1903, stated that the position of the market there still remains uncertain and prices hold firm.

TALC.—The movement in domestic was light and buyers in most instances continued to resort to the hand-to-mouth policy in making purchases. producers in the South continued to name $25 per ton, which led to holders here refusing to trade under $1.10 per 100 pounds, and all indications point to this figure being maintained. The movement in foreign was moderate and former prices were obtained by sellers, ranging from 2@2¼c. for French and 2¼@2¾c. for Italian, according to quality and terms of sale. It is intimated that there will be no hearing, as regards the duty on talc, before October or November. The steamer Hohenzollern which arrived from Italy brought 500 bags of Italian talc. Trade, on the whole, was considered as fair for this time of the year. Advices received from Leghorn, under date of July 1, 1903, read as follows:—

"A fact of sufficient importance we have to point out to you with reference to powdered talc. For some time your custom house authorities showed some intention to apply to this article the duty of one cent per pound, considering it as French chalk, instead of 20 per cent. ad volorem, as it has paid hitherto. In the last tariff these two articles appear quite distinctly. French chalk, in our opinion, applies to the article cut and prepared for tailors' use, and, in fact, the words French chalk do not bear the addition of 'powdered,' such as is the case with talc. At any rate, what we ship is nothing but pure and powdered talc, not French, but Italian. It seems extraodinary to us that your custom house authorities should insist upon having it pay the same duty as French chalk, which is quite a different article. During the last days many customers in the United States have canceled their orders or instructed us to suspend shipment. We hope that the unjust pretension of your custom house authorities will soon be quieted, but if this should not be the case, there will no longer be any use for us to ship a single bag of this article into your country."

TERRA ALBA.—Under a fairly active jobbing demand, supplies on the spot continued to be moderate and sellers obtained full previous prices. Domestic Nos. 1 and 2 sold at 65@85c. and 45@50c., according to terms of sale. Imported brought steady unchanged values ranging from 95c.@$1, according to quality and terms of sale.

WHITING.—The deliveries on outstanding orders were reported by manufacturers as having been fairly good. New orders booked were of a satisfactory volume and the call in most instances was for immediate shipments. Prices remained firm without quotable change on the basis of 48@55c. for commercial, according to terms of sale.

Glues.

The position of the market remained practically unchanged and prices were stationary, with the undertone firm. Trade, however, continued to be slow and business transacted was strictly of a hand-to-mouth character. As a result of the light available supplies of the manufactured grades, and makers having practically ceased to turn out more goods, stocks showed a slight decrease. In response to this prices continued to rule firm, particularly for the better grades, which, according to reports, are becoming scarce.

Varnish Gums.

Nothing of interest transpired in the local market, and the usual summer dullness was apparent. Business transacted was principally in small jobbing lots, to meet immediate requirements of the consuming trade. Kauri was firm, in response to cables from Auckland noting an active demand, scarcity of supplies and prices strong with an advancing tendency. It was intimated that several good sized parcels of kauri

TINNOL—A PASTE THAT STICKS
No Rust Spots on Tin. No Peeling Off. No Discoloring of Labels.
WRITE FOR SAMPLE AND PRICES TO
The Arabol Manufacturing Co. 100 William Street, NEW YORK.
Headquarters for SIZING, PASTES, GUMS and MUCILAGES for all purposes.

A Double Label

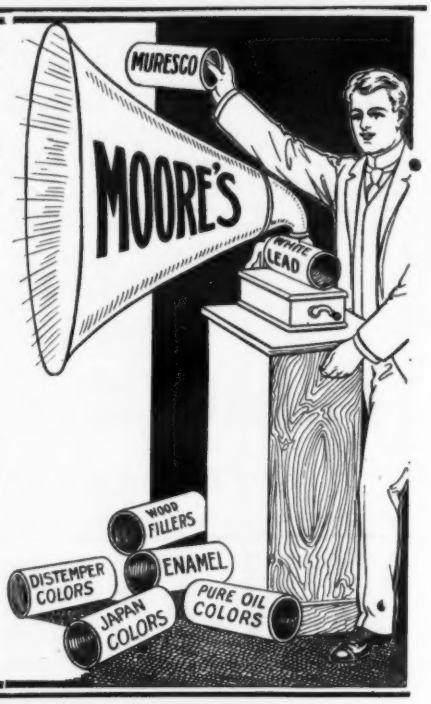
is our Trade Mark.

TO GRINDERS:

The genuine PRINCE'S "DOUBLE LABEL" MINERAL BROWN, is cheaper than others because it requires less oil to grind it in paste form and—because 300 lbs. of it will make more ready mixed paint than 400 lbs. of other metallic paints. A trial will prove this.

THE PRINCE MANUFACTURING CO.,
71 Maiden Lane, New York.
Send for samples of our Red Oxides and Fully Hy-o-rated Gypsum.

We repeat again and again by saying that Moore's products stand for a new standard—for
STRENGTH
FINENESS
PERMANENCY
To the dealer who does not carry Moore's line, we say he has lost much, so order
MOORE'S
Pure Oil Colors,
Wood Fillers,
White Lead,
Distemper Colors,
Japan Colors,
Muresco, Etc.,
You will be more than satisfied. We have yet to learn of a dealer who has not found them good sellers.
We have more printed matter on the subject, and our prices are made right to the dealer.
Benjamin Moore & Co.
248 Water St., Brooklyn, N. Y.
111-117 N. Green St., Chicago, Ill.



ADELITE PAINT SPECIALTIES are Unsurpassed. Send for Catalogue.

WAXELITE FOR FLOORS
TRADE MARK

WAXELITE
The Best article of its kind yet introduced to the Paint, Oil and Drug Trade for Dressing and Preserving KITCHEN and all other FLOORS, and its extreme merit creates immediate demand. A Boom to every housewife.
SEND FOR CIRCULAR AND FULL PARTICULARS FOR SPRING TRADE TO
Adams & Elting Co.
CHICAGO, U.S.A.

We Make ENAMELS AND FLOOR FINISHES

MANGANESE.
Asphaltum, Varnish Gums, &c.
JOHN S. LAMSON & BRO., 77 Maiden Lane, New York.

THE FRENCH ASSEMBLY

On July 1st adopted the Government's "project of law" prohibiting the use of white lead and litharge oil after two years. In speaking to the question Representative Cazneuve said:

"When the Government realized the impossibility of protecting match factory employees against phosphorus necrosis it abandoned phosphorus, and sought a substitute. This was found in sulphide of phosphorus, which is not poisonous, and phosphorus necrosis has disappeared from its match factories. Lead poisoning must also disappear in the same way. [Shouts of 'very good.'] It is objected that the oxide of zinc, which is expected to replace white lead covers less solidly than the latter product. The reports of the Council General of Civic Structures and of the Council of Engineers in Chief of Bridges and Highways answer this objection. In reality workmen have not yet acquired the habit of painting with zinc oxide. As regards durability, the test has been made: oxide of zinc lasts as long as lead, even on beacons where it is subjected, as they are, to the highly corrosive action of sea water. A prohibitory law is necessary * * * * * * it is a proposal in behalf of the public health." [Applause.]

ZINC WHITE

Where it has been longest and best known has been proved free from the faults imputed to it by ignorance and prejudice.

The New Jersey Zinc Co.

—FREE—
Our Practical Pamphlets:
"The Paint Question."
"Paints in Architecture."
"Specifications for Architects."
"House Paints: A Common Sense Talk About Them."
"French Government Decrees."

11 Broadway
NEW YORK

due to arrive here were sold at private terms. In the other grades of gum little was done, and the movement in spot supplies continued to be slow. Prices, however, were steady and as stocks on the spot were light, holders continued to name previous prices.

Window Glass.

The market presented a quiet and uninteresting appearance throughout the past week, and the usual midsummer dullness was apparent. Local members of the National Window Glass Jobbers' Association continued to name prices on the basis, as heretofore, namely, discounts 90 and 5 per cent. on the first three brackets, and 90 and 15 per cent. on all other brackets for double and single, off the present list. Various reports were received from Pittsburgh as regards the wage scale to be settled between the workmen and manufacturers. It is intimated that the American Company will undoubtedly agree to a wage scale on a satisfactory basis with the glass blowers, in order to prevent any cutting in prices of glass by the competitors who are not equipped with glass blowing machines. What the outcome of the price agreement will be and regarding the regulation of production is difficult to foreshadow. Present indications are that not only will the usual number of window glass factories resume operations in another year, but that a number of additional plants will be operated on a more extensive scale.

F. O. PIERCE COMPANY

Manufacturers of

Fine Paints

170 Fulton Street, NEW YORK.

WORK WITHIN

For work within doors, where a good finish must be obtained at a minimum expense, our **PALE COACH VARNISH** is just right—and it lasts. It is light colored, works easily, dries with a fine gloss and gives the painter the very best of satisfaction. All dealers should have this article in stock.

PRATT & LAMBERT

MAKERS OF FINE VARNISHES

NEW YORK CHICAGO BUFFALO

GERMAN POWDERED BARYTES (Sulphate), "SWOOO," "LION," "GOOO." CRUDE BARYTES (Sulphate), CARBONATE OF BARYTES (Precipitated), CHLORIDE OF BARIUM, BLANC FIXE, SATIN WHITE,
NITRATE OF BARYTA and STRONTIAN.
LITHOPONE, representing Mess. Sachtleben & Co., Schoningen, Homberg, Germany.
OXIDE OF ZINC, representing Mess. Lindgens Soehne, Mulheim A|B, Germany.
DRYERS of All Kinds, DRY COLORS, etc.
IMPORTED BY
GABRIEL & SCHALL, 205 Pearl Street, NEW YORK.

NATIONAL TALC CO. 19 South William St. & 51 Stone St., NEW YORK.
Producers of and Dealers in
HIGH GRADE TALC
It is Free from Grit and Chemically Pure. Mills and Mines (Hillier Mines), KINSEY, N. C.

E. S. BELKNAP—McSHERRY & MORAN CO.
Successor to E. S. BELKNAP MFG. CO.
Office and Factory, 286 Monroe St., New York
The Oldest PUTTY ESTABLISHMENT in the United States

HOOPLE & ANDROVETTE, 218-222 Fulton Street NEW YORK.
IMPORTERS OF
GUM SHELLAC, GAMBIER, SUMAC, CUTCH, DYE STUFFS, &c.
MAMUFACTURERS OF
Bleached Shellac and Shellac Varnish, Columbian Spirits and Refined Wood Alcolol
Telephone: 6090, 6091 Cortlandt.

SAMPLES AND PRICES ON APPLICATION.
COLOR CARDS AND PAINT SAMPLES
KINSEY & JOHNSTON CINCINNATI, O.

EDWARD HILL'S SON & CO.
71 Pine St., NEW YORK.
Ceylon and Cochin Cocoanut Oil, Double Star Citronella, Caustic and Carbonate Potash, Opium, Arsenic.

VARNISH GUMS
Dr. Eugen Schaal, Fuerbach, Württemberg,
Ester Gums and Driers for Varnish Making.
Schutzmarke. Agents: MORRIS HERRMANN & CO., 225 Pearl St., New York

PAINT GRINDERS' DRY COLORS,
French Ochre a Specialty.
ERNST C. BARTELS,
88 Wall Street, - - - - NEW YORK

PITTSBURGH PLATE GLASS CO. THROUGH ITS TWENTY WAREHOUSES
POSSESSES UNRIVALED JOBBING FACILITIES IN ALL ITS LINES
Large and complete stocks of POLISHED PLATE GLASS and SILVERING PLATE in ALL THICKNESSES are always on hand and can be shipped from each or any of the Warehouses with promptness.
MIRRORS There are plants at the various warehouses for the manufacturer of Plain and Bevelled Mirrors; and where Silvering and Bevelling are done on a larger scale than at any establishments in the country. **WINDOW GLASS**
In large stocks and of all sizes, together with fullest lists of **Paints, Oils, Leads, Varnishes and Brushes.**
We are Sole Distributors of **PATTON'S FAMOUS SUN-PROOF PAINTS.** Also Jobbers of Mirrors, Bevelled Plate, Art Glass, Skylight and Floor Glass, and Bent Glass. Our Warehouses, where complete stocks of Sun-Proof Paints, and Glass in all lines are kept constantly on hand, are as follows:
NEW YORK, Hudson and Vandam Sts.; CHICAGO, 441-452 Wabash Ave.; ST. LOUIS, Cor. 12th and St. Charles Sts.; PITTSBURGH, 101-103 Wood St.; DETROIT, 55-58 Larned St. E.; MILWAUKEE, 492-4 Market St.; DAVENPORT, 410-416 Scott St.; BROOKLYN, 635-37 Fulton St.; BALTIMORE, Daily Record Building; ST. PAUL, 340-51 Minnesota St.; KANSAS CITY, MO., 5th and Wyandott Sts.; OMAHA, 1608-10-12 Harney St.; BOSTON, 41-49 Sudbury St.; GREENSBORO, N. C., Greensboro Loan & Trust Co. Bldg.; CINCINNATI, Broadway and Court Sts.; MINNEAPOLIS, 500-510 South Third St.; BUFFALO, 372-4-6-8 Pearl St.; PHILADELPHIA, Pitcairn Bldg., Arch and Eleventh Sts.; CLEVELAND, 149-51 Seneca St.; ATLANTA, GA., 32 and 34 S. Pryor St.; SAVANNAH, GA., 602-618 River St.

GET IN LINE—SELL
ARMY AND NAVY LIQUID GLUE
Increase your Sales—A 20th Century Liquid Glue—Increase your Profits

The Best and Strongest Glue that Money, Experience and Brains has produced. NOT A FISH GLUE—A Pure Animal Glue. The only Animal Glue in Liquid Form made.

This Glue

will not Sour, Mold, get Brittle, Brash or Crumble.
Stands more Heat and Cold.
Smooth as Oil.
More Easily Applied than other Glues.
Always ready for use.
Does More Work.
Does Better Work.

Saves Waste, Time, Trouble, Annoyance and Insurance.
We do the Work, you enjoy the Benefits.

Cans, Kegs, Barrels, Tubes and Bottles

All size Cans—no Screw Tops, Friction Tops—easy to open and close.
Every drop can be used.

You want the best Glue. We make it.
Let us quote you prices.
Can we send you trial order?

Yours to Stick **Wachter Mfg. Company** Baltimore, Md.

Always Uniform

"Much Virtue in an 'if'"

If the old Dutch process produced white lead that was uniform in color, composition and density, and *if* these qualities were uniformly of the high grade required in perfect lead, there would have been no reason or incentive for seeking to invent a better process; but it doesn't, and that is all that need be said—the lack of uniformity and the impossibility of foretelling the results of any corrosion are fatal defects.

Bailey Process White Lead

(Old Dutch Perfected)

is always uniform in all its qualities, and that fact is sufficient to make it interesting to lead users. The additional fact that its qualities are uniformly of the highest grade of excellence is sufficient to confirm them in its use.

WHITE LEAD
LEAD OXIDES
SHEET LEAD

LEAD TRAPS
LEAD PIPE
LINSEED OIL

Union Lead & Oil Co.

Office and Factory, 81 Front Street,

BROOKLYN, N. Y.

An interesting Booklet, all about it, for the asking

Kentucky Refining Co.,

LOUISVILLE, KY., U. S. A.,

Cable Address, "Refinery," Louisville.

MANUFACTURERS AND REFINERS OF ALL GRADES OF

COTTON SEED OIL,

Summer and Winter Yellow Oil.
Yellow and White "Miners'" Oil.
Crude C. S. Oil, "Red Star" Soap, Soap Stock.

SPECIALTIES:

"DELMONICO" COOKING OIL

"ECLIPSE" BUTTER OIL

"SNOW FLAKE" PRIME SUMMER WHITE

"NONPAREIL" SALAD OIL

CAKE, MEAL, LINTERS, ASHES, HULLS.

JULIUS DAVIDSON,

BROKER.

Packing House Products, Cottonseed Oil

302-303 KEMPER BUILDING, KANSAS CITY, MO.

CHARLES L. WISE & CO.,

INSURANCE BROKERS,

45, 47, 49 CEDAR STREET, NEW YORK CITY.

Write us for special rates on your Fire, Employers' Liability, Boiler and Profit Insurance. We insure Cotton Seed Oil Mills, Cotton Gins and Manufacturing Plants having good fire protection. Inquire of us regarding the best method for securing minimum rates of insurance.

FRANK L. YOUNG & KIMBALL

Successors to { GEORGE DELANO'S SONS,
GEO. S. HOMER,
SAMUEL LEONARD & SON.

Manufacturers of Sperm, Whale, Sea Elephant and Fish Oil, Spermaceti and Patent, Plain Sperm and Paraffine Wax Candles.

Boston Office, 111 Purchase St.

NEW BEDFORD, MASS.

F. W. BRODE & CO., Memphis, Tenn.

COTTONSEED PRODUCTS.

Crude Oil.
Summer Yellow.
Summer White.
Cooking Oils.

Meal and Cake, Soap Stocks.

Agents for the J. T. PERKINS CO.'S PRESS CLOTH.
Different Sizes and Weights always on hand.
All kinds of Bags and Twines for Mill purposes.

TRINITY COTTON OIL CO.

MANUFACTURERS AND

Refiners of Cottonseed Oil.

DALLAS, TEXAS, U. S. A.

Cable Address, - - - - "Trinity."

American Linseed Company,

MANUFACTURERS AND REFINERS OF

Linseed Oil, Cake, Meal and Ground Flaxseed

"Lubrix" Drilling Compound. Pure Linseed Oil Soap.

SPECIAL OILS:

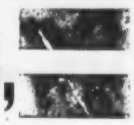
RAW,	CALCUTTA VARNISH,	VACUUM RAW,
BOILED,	CLEVELAND RAW,	DEAN REFINED,
BLEACHED,	SPECIAL "A"	C. & T.,
P. M. P.,	CLEVELAND VARNISH,	CLEVELAND REFINED,
CALCUTTA RAW,	LEAD GRINDERS' OIL,	C. V. (DOMESTIC).

AMERICAN LINSEED COMPANY,

100 William St., New York. **Manhattan Bldg., Chicago**

ST. LOUIS, PHILADELPHIA. CLEVELAND, PORTLAND, ORE., MINNEAPOLIS, RICHMOND, BALTIMORE, TOLEDO SAN FRANCISCO, BOSTON, BUFFALO, DETROIT.

SPENCER KELLOGG,



Independent Crusher,

LINSEED OIL,

BUFFALO, NEW YORK.

OUTPUT—300,000 Barrels Linseed Oil, 100,000 Tons Oil Cake.

CAPACITY—6,000,000 Bushels Flaxseed.

Florida Cotton Oil Co.

(REFINING DEPARTMENT)

Manufacturers and Refiners of

COTTONSEED OIL

HOMESTEAD," Prime Summer Yellow—"DAIRY QUEEN," Butter Oil—" PURITY," Cooking Oil—Yellow and White Miners' Oil.

SUMMER WHITE and SUMMER YELLOW OIL.

FULLING and SCOURING SOAP.

REFINERY and MILLS: Jacksonville, Fla., U. S. A. || SALES OFFICE: Chattanooga, Tenn., U. S. A

GLOBE REFINERY CO.

Louisville, Ky., U. S. A.

REFINERS OF

COTTON SEED OIL.

Winter White. Winter Yellow.
Summer White. Summer Yellow.
Salad. Cooking Oil. Soap Stock.
Fulling and Scouring Soap.

CHURN BUTTER OIL.

TANK CARS FREE.

Cable Address, - - - - "Globe," Louisville.

J. J. CAFFREY, *President*, formerly Secretary Kentucky Refining Co.
CHAS. P. FINK, *Secretary and Treasurer.*

Louisville Cotton Oil Co.,

Refiners of

ALL GRADES of COTTON SEED OIL.

SPECIALTIES:

"Louisville" Butter Oil. "Progress" Butter Oil.
"Progress" Cooking Oil. "Royal" Prime Summer Yellow.
YELLOW and WHITE MINERS' and SOAPMAKERS' OILS.
"Ideal" Prime Summer White for Compound Lard.
"Louisville" Star Soap.

Office and Refinery:
Floyd & K Streets.
P. O. Station E.
Cable Address:
"Cottonoil," Louisville.

Tank Cars Free for Sales or Purchasers.
Codes Used:
Private, Twentieth Century, and A. B. C., Fourth Edition.

LOUISVILLE, KY., U. S. A.

OIL MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 30.

Saturday Evening, July 18, 1903.

Vegetable Oils.

LINSEED.—As intimated at the close of our last, city crushers early in the week reduced prices 2c., making raw 38@39c. and boiled 40@41c. For the first time in months Calcutta oil was reduced 10c., making price 65c. There is only a small retail demand for spot oil, which is selling outside of city makes at 36@37c. by second hands. Futures are quoted at 36c., possibly 25c. could be done for a round lot, but buyers are indifferent, as they have their mark for 30c. oil, and only buy sufficient stock to cover their current wants.

COTTONSEED.—The trade has been more interested in watching the ups and downs in both lard and tallow, fluctuations of which have been wider than they have in cotton oil. Early in the week lard was declining from 30 to 40 points a day, then all of a sudden packers rushed it up 115 points in one day, since which it has gradually been working downward. Tallow, on the other hand, has been on the decline, and this has been reflected in lower prices for all grades of soap greases. With all these disturbances in the provision markets, combined with a demoralized stock market cotton oil has shown no weakness, but rather maintained a firmer position. How long this will continue it is hard to say, but with at least three months yet before new crop bleaching oil can be relied upon, prices for this grade of cotton oil will remain around 40c. or 41c. Of course it will depend very largely upon the course of pure lard and its effects upon compound lard. At present the demand for the latter is slow and will continue so until the difference between this and pure lard widens more than it was before the sudden rise in pure lard, which is considered by the trade only temporary or until the shorts have been forced to cover. The stocks of bleaching cotton oil are not excessive, and as they are controlled by two or three holders who are able to hold them, prices will probably hang around present figures demanded for this grade of oil. The only sales of importance the past week have been 25 tanks of choice bleaching oil at 41c. loose, delivered at this point, and about 3,000 bbls. of prime yellow for July at 42½@43c., and 500 bbls. off yellow at 38c. There is rather more pressure to sell off yellow at New Orleans at 35c., with 34½c. bid. There are more sellers of new crop October crude at 31c. than there are buyers at the moment, while November and December are offered at 29@29½c., but the offerings are small, otherwise sellers would be seeking bids, which, in the present condition of the crop, they are not doing. There is more or less talk around the trade of a speculative short July interest, and possibly there may be; if so, it is small and will have no perceptible effect on the market. One who makes a study of the crop and financial situation sums it up as follows:—

Wellnigh perfect summer weather helps crops, increases confidence in fall trade and stimulates retail and summer resort business. Speculation droops and sags, but, on the whole, the tendency even here is in the direction of improvement, because it favors progress toward a sounder and healthier basis for possible future activity. Lower prices for many staples are really an encouraging development, because favorable to a wider and freer use of products heretofore impracticable under past abnormal conditions. The money situation promises well, though predictions of higher rates in the future tend to conservatism in the employment of funds. Six months' railway earnings returns—two-thirds of the country's mileage represented—show a gain of over 13 per cent. over the best ever recorded, while roads thus far reporting for the first week of July show a gain of nearly 16 per cent. These figures confirm the claim that present business is the largest ever handled for a midsummer period. The salient features in trade reports this week are the better tone of trade advices from the Southwest, where the feeling grows that a large business will be done. This is fortified by the reports of as good or better than expected yields of already harvested crops, and fine prospects for those yet to be gathered. Kansas City reports that freight is still badly congested in that city's territory, and it is feared that the movement of the new winter wheat crop will greatly aggravate this trouble.

There is no change in winter oils, the demand for which is of the usual jobbing nature, and the same may be said of prime yellow. At the close the market is a waiting one and will probably continue so for the present. About all of the old crude in the valley has been cleaned up by soap makers and refiners at advanced prices over the sales made early in the month, so that what oil is left is unimportant, so far as quantity is concerned.

EXPORTS OF COTTONSEED OIL FROM NEW YORK, BY COUNTRIES.

	For week ending July 16, 1903.	Since Sept. 1, 1902.	Same time last year.
Africa, Algiers	....	6,729	2,790
Egypt	....	3,052	.....
South	....	749	718
West Coast	....	50	.....
Argentine Republic	....	829	819
Australia & New Z.	....	1,461	942
Austria	....	28,362	21,874
Belgium	25	1,742	6,124
Brazil	....	16,834	20,674
British East Indies	....	.....	16
British Guiana	47	1,003	1,645
British West Indies	97	4,714	5,032
Central America	....	85	52
Chili	10	474	672
China	....	.....	5
Cuba	....	309	716
Danish West Indies	....	140	130
Denmark	....	8,166	5,481
Dutch Guiana	....	2	3
Dutch West Indies	....	3	8
Ecuador	....	50	31
England	310	25,307	20,217
France	750	87,892	68,325
French Guiana	....	315	291
French West Indies	200	7,443	8,301
Germany	50	20,408	14,727
Gibraltar	....	25	350
Italy	....	35,998	19,150
Japan	....	1	1
Malta	....	4,785	1,514

The
Procter & Gamble Co.

Refiners of All Grades of

COTTONSEED OIL

White Clover Cooking Oil
Puritan Salad Oil

Marigold Cooking Oil
Aurora, Prime Summer Yellow
Boreas, Prime Winter Yellow
Sapho, Summer White "Miners"
Venus, Prime Summer White
Jersey Butter Oil

Tank Cars Free to Purchasers

Cable Address: Procter, Cincinnati, U. S. A.
Office: CINCINNATI, O.
Refinery: IVORYDALE, O.

THE AMERICAN COTTON OIL COMPANY

27 BEAVER STREET, NEW YORK CITY.

CABLE ADDRESS AMCOTOIL

COTTON SEED PRODUCTS

CHICAGO 1893.

PARIS 1900.

THE AMERICAN COTTON OIL CO. PRIME SUMMER YELLOW NEW YORK
THE AMERICAN COTTON OIL CO. PRIME SUMMER WHITE NEW YORK
THE UNION OIL CO. UNION BUTTER OIL NEW ORLEANS, LA.
Union Oil Co PURE SALAD Oil Providence, R.I.
THE AMERICAN COTTON OIL CO. PRIME TXL COOKING OIL NEW YORK
PLANTERS NEW ORLEANS
THE AMERICAN COTTON OIL CO. SUN BRAND NEW YORK
THE AMERICAN COTTON OIL CO. MOON NEW YORK

BUFFALO 1901.

CHARLESTON 1902.

The American Cotton Oil Company,

27 Beaver Street, New York City

Southern Cotton Oil Company.

HEAD OFFICE: 11 BROADWAY, NEW YORK.

CABLE ADDRESS, - - - - - - - "SOCOTOILCO," NEW YORK.

Mills and Refineries in Georgia, North and South Carolina, Alabama, Tennessee, Arkansas, Louisiana and Texas.

MANUFACTURERS OF ALL COTTON SEED PRODUCTS.

THE SOUTHERN COTTON OIL CO. PRIME SUMMER YELLOW
THE SOUTHERN COTTON OIL CO. THE ACE BRAND
THE SOUTHERN COTTON OIL CO. THE KING BRAND
THE SOUTHERN COTTON OIL CO. CHOICE SUMMER YELLOW
THE SOUTHERN COTTON OIL CO. CHOICE BUTTER OIL
THE SOUTHERN COTTON OIL CO. 44 WESSON

THE SOUTHERN COTTON OIL CO. 88 WESSON
THE SOUTHERN COTTON OIL CO. CHOICE WINTER YELLOW
THE SOUTHERN COTTON OIL CO. 33 WESSON
THE SOUTHERN COTTON OIL CO. 77 WESSON

OIL CAKE and MEAL. ✱ HULLS. ✱ LINTERS. ✱ SOAP STOCK and SOAP.

REFINERS OF COTTON OIL, ALL GRADES.

MANUFACTURERS OF LARD COMPOUND.

REFINERIES LOCATED AT

Savannah, Augusta and Atlanta, Ga.; Charleston, S. C.; Charlotte, N. C.; Montgomery, Ala.; Houston, Tex.; New Orleans, La.; Memphis, Tenn., and Little Rock, Ark.

Mauritius	....	2,000	1,380
Mexico	2	394	224
Morocco	....	37	.....
Netherlands	100	13,202	17,652
Newfoundland	....	545	602
Norway & Sweden	....	2,897	1,860
Nova Scotia	....	62	33
Peru	....	66	24
Philippine Islands	....	1	.....
Porto Rico	....	348	26
Roumania	....	280	.....
Russia	....	.....	255
San Domingo	....	2,511	2,475
Scotland	....	3,495	4,588
Turkey	....	965	90
U. S. Colombia	22	828	505
Uruguay	95	4,108	4,025
Venezuela	....	95	32
Total, bbls.	1,708	289,166	234,495

EXPORTS OF COTTONSEED OIL FROM NEW ORLEANS, BY COUNTRIES.

	For week ending July 16, 1903.	Since Sept. 1, 1902.	Same time last year.
Austria	....	31,347	4,767
Belgium	....	2,133	50
Central America	....	.....	10
Cuba	165	1,830	25
Denmark	....	5,050	7,650
England	....	8,490	8,708
France	....	22,814	40,422
Germany	....	4,412	6,722
Ireland	....	575	1,300
Italy	....	500	600
Mexico	....	300	.....
Netherlands	....	42,575	54,150
Scotland	....	2,975	700
Total, bbls.	165	123,001	125,104

EXPORTS OF COTTONSEED OIL FROM BALTIMORE, BY COUNTRIES.

	For week ending July 16, 1903.	Since Sept. 1, 1902.	Same time last year.
Belgium	....	745	.....
England	....	535	100
France	....	1,250	500
Germany	....	3,404	3,563
Ireland	....	150	75
Netherlands	....	13,598	10,446
Scotland	....	500	.....
Total, bbls.	....	20,182	14,684

EXPORTS OF COTTONSEED OIL FROM NEWPORT NEWS, BY COUNTRIES.

	For week ending July 16, 1903.	Since Sept. 1, 1902.	Same time last year.
Belgium	....	868	1,683
England	....	3,160	7,448
Germany	....	23,885	22,432
Netherlands	....	29,178	39,222
Scotland	....	363	667
Total, bbls.	....	57,964	71,452

EXPORTS OF COTTONSEED OIL FROM GALVESTON, BY COUNTRIES.

	For week ending July 16, 1903.	Since Sept. 1, 1902.	Same time last year.
Austria	....	4,432	.....
Denmark	....	1,674	999
England	....	.....	1,575
France	....	.....	10,009
Germany	....	3,470	200
Mexico	....	14,819	25,225
Netherlands	....	35,142	40,965
Total, bbls.	....	59,537	79,063

TOTAL EXPORTS AT PRINCIPAL PORTS.

From—	For week ending July 16, 1903.	Since Sept. 1, 1902	Same time last year.
New York	1,708	289,166	234,495
New Orleans	165	123,001	125,104
Baltimore	....	20,182	14,042
Newport News	....	57,964	71,452
Galveston	....	59,537	79,063
Total, bbls.	1,873	549,850	524,156

The following are the official returns of the exports of cottonseed oil, in gallons, during the months of May, 1903 and 1902, furnished by the Bureau of Statistics, Washington:—

	1903.	1902.
Bangor	200	.....
Baltimore	60,950	198,000
Boston & C.	1,260	6,434
Champlain	1,295	189
Corpus Christi	21,405	23,000
Detroit	94,479	67,666
Galveston	246,722	412,000
Huron	29,010	16,322
Mobile	.....	13,111
New Orleans	536,803	488,242
Newport News	41,400	277,420
New York	671,887	942,787
N. & S. Dakota	.....	3,488
Norfolk & P.	261,020	.....
Philadelphia	.....	12,965
Saluria	53,941	48,365
San Diego	10	.....
San Francisco	714	548
Savannah	84,625	263,368
Vermont	3,627	1,722
Totals, gallons	2,109,348	2,775,577

TOTAL MONTHLY STATEMENT.

	1900.	1901.	1902.	1903.
Jan.	7,100,740	6,089,587	3,553,840	4,252,774
Feb.	4,185,033	6,280,992	2,201,340	2,908,178
March.	4,133,688	5,251,955	2,272,824	3,025,721
April.	3,056,532	4,994,895	2,255,276	2,033,959
May.	3,012,760	3,991,528	2,775,577	2,109,348
June.	2,041,088	2,339,703	1,761,837	.....
July.	1,289,595	1,852,602	1,876,842	.....
Aug.	3,154,303	1,843,434	1,626,299	.....
Sept.	2,202,682	1,535,701	2,725,093	.....
Oct.	2,805,504	3,837,162	4,091,322	.....
Nov.	4,788,607	4,371,917	4,606,601	.....
Dec.	6,168,279	4,795,760	5,063,169	.....
Totals	44,538,756	47,005,231	34,870,017	.....
Av'ge.	3,711,563	3,917,103	2,905,835	2,865,996

(Special Cablegram to the Reporter.)

Liverpool Cotton Oil Market.

Liverpool, July 17, 1903.

Cotton oil, July-August, £25; September-October, £23 10s.; cake, £5 13s. 9d.; meal, £5 13s. 9d.; Egyptian seed, £5 5s.; Sea Island, £4 18s. 9d. per ton c. i. f. Liverpool. Oil steady. Cake and meal are dormant.

(Special Cablegram to the Reporter.)

Marseilles Cotton Oil Market.

Marseilles, July 17, 1903.

There is no improvement in the condition of the market.

(Special Cablegram to the Reporter.)

Rotterdam Cotton Oil Market.

Rotterdam, July 17, 1903.

The market is very quiet, with scarcely any movement. Butter oil, prompt shipment, 34½ florins per 100 kilos c. i. f. Rotterdam.

(Special Cablegram to the Reporter.)

Hamburg Cotton Oil Market.

Hamburg, July 17, 1903.

The market is quiet at last quotations. Prime summer yellow, 50 marks; off oil, 48½ marks per 100 kilos for prompt shipment f. o. b. Hamburg. Prime Texas meal for prompt shipment, 127 marks; cake, 124 marks; bolted, 131 marks per ton, c. i. f. Hamburg.

Cocoanut Oils, Etc.

CEYLON.—The unsettled condition of the tallow and lard markets is reflected in a limited demand for spot oil. The recent arrivals, which were large, have supplied the large consumers for the present. Small sales are reported in a jobbing way on the spot at 5½c., and for July-August arrival at 5⅜c. August-September shipments are held at 5⅛c., with 5c. declined for 300 tons.

COCHIN.—Small jobbing sales of spot oil are reported at 6@6¼c., as to the size of the order. For arrival July-August 6c. is asked and for July-September shipment 5¾c., with no business reported of importance.

CORN.—The market is quiet and prices may be quoted nominal for car lots at 4.30c. and for jobbing parcels at 4½c. The demand from the paint trade is limited at the moment.

OLIVE.—There is a fair jobbing demand for spot yellow at 53@55c. and for arrival at 51½@52½c., according to quality. Green oil is scarce and held at 57@58c. Olive foots of a choice quality on the spot are scarce and held firm at 6c., while for prompt shipment 6 3-16@6¼c. is named. Spanish grades are easier at 5¾c.

PALM.—Spot stocks of prime red is not over plentiful and is offered in a limited way at 5½c. For arrival, however, prices are easier at 5⅛@5¼c. Lagos for July shipment is quoted at 5⅜c.

RAPE.—Rather more demand in a jobbing way for spot parcels at 63@65c. for choice burning grades and 60@62c. for refined and blown, as to quantity and seller.

Animal and Fish Oils.

COD.—Owing to the scarcity of supplies, particularly of Newfoundland, prices remained firm. Holders named 42@43c. for Newfoundland, and 37@38c. for domestic prime, according to terms of sale. Transactions were light and general dullness pervaded the market.

DEGRAS.—In the absence of buyers and no news of interest from abroad, business in a large way was practically at a standstill. Trading in spot parcels was strictly of a hand-to-mouth character. Prices were steady but nominal, and holders, as a rule, named 2¼@2½c. for German. Other grades were unchanged.

LARD OIL.—Notwithstanding the sharp rise in prices of lard as a result of speculative manipulations in order to squeeze shorts, prices of prime oil where not affected and decided weakness developed, showing a loss of 2c. This was attributed to heavy available supplies of oil, and the anxiety on the part of large holders to market their stocks. Manufacturers reduced prices of prime to 66c., extra No. 1 to 52c., No. 1 to 44c. and No. 2 to 43c. Buyers held aloof and only small lots were sold at above figures. It was intimated that bids at 2c. below prices asked for large lots would have resulted in sales. The close was weak and prices tended downward.

MENHADEN. — Reports on fishing from some quarters were of more favorable character. Fishing in the vicinity of Cape Cod and along the coasts of Maine and off the eastern end of Long Island were exceptionally good, resulting in fairly heavy catches of large fish, which yielded a good quantity of fine oil. Later reports received from fishermen noted that the fish had slackened off and scattered, consequently causing a material reduction in the last catches. Reports from the South on fishing continued to be unfavorable. Trade in the local market was very quiet and no transactions in spot parcels or in lots for future delivery were made, as buyers still refuse to pay the prices asked. In the manufactured grades little was done and business transacted was wholly of a routine character at previous prices.

NEATSFOOT.—The market presented a weak and uninteresting appearance, but prices remained quotably unchanged, with the undertone easy. Water white oils were very scarce, and offerings were readily absorbed at full, firm prices asked. Cold test was unobtainable and only small lots of 20 deg. were placed on offer and readily absorbed for export at $1. White neatsfoot was held at 68c., prime at 57c., and dark at 50c., resulting in few sales.

RED.—In response to an easy market for tallow, and general absence of buyers, a weak and uninteresting market for saponified oil was noted. The large available supply was freely offered at prices ranging from 4⅜@4⅞c., finding few buyers. It was intimated that bids of ¼@½c. below values asked for large parcels, would have led to business. Elaine was easy in tone and quoted at 45c.

TALLOW OIL.—Prices were very weak, in sympathy with the decline in values for tallow, and dullness characterized the market. Holders reduced quotations 1c. to 53c. for prime. Acidless was lowered to 52c., and dark declined to 48c. Notwithstanding the above reductions, buyers still remained indifferent and business continued to drag. The belief is that, in all probability under the existing unfavorable market conditions, prices will seek a lower level in the near future.

WHALE AND SPERM. — Advices from New Bedford note that the market there for sperm oil has been quiet and that no sales were made. The stock of sperm oil at New Bedford was 2,724 bbls. on July 13, and of whale oil, supplies were nil. The spot supply of manufactured whale oil here continued to be light, but the spot stocks of sperm were of a fair volume. Offerings of the latter were made at slightly lower prices, and holders named 65@66c. for natural spring, 69@70c. for natural winter, 67@68c. for bleached spring and 71@72c. for bleached winter, according to terms of sale, resulting in small sales. Prices of whale were firmly held and dealers, as a rule, named 46@47c. for natural winter and 48@49c. for bleached winter.

Mineral Oils.

The demand lacked animation and business transacted was principally of a small routine character. The general feeling in the trade is that the market will go lower, and consequently buyers continued to take such supplies as were actually needed to fill urgent wants. Prices, however, were without quotable change, but the undertone was easy owing to reports to the effect that independent refiners continued to accept orders below quotations. Black summer was quoted at 12½@13½c., dark and light filtered cylinder at 18½@19½c. and 20½@21½c., according to terms of sale. Paraffine was held on the basis of prices ranging from 15@15½c. for 903-907 specific gravity and spindles on the basis of 14½@15½c. for No. 1, according to terms of sale.

Oil Cake, Meal, Etc.

There is only a limited demand for linseed cake, as crushers are not disposed to sell beyond August. Small sales are reported at $23.50, with $23 bid for July-October. Cotton meal is firmer at $27 for Boston delivery and $26.70 for New York.

Exports of Flaxseed from New York.

BY COUNTRIES, IN BUSHELS.

	For past week.	Since Aug. 1, 1902.	Same time, 1901.
Belgium	....	638,111	580,138
Denmark	....	16,746	41,891
England	....	552,577	467,179
France	....	193,333	286,596
Germany	....	287,817	167,245
Italy	....	52,557	.....
Netherlands	20,594	732,506	507,638
Scotland	....	8,293	17,218
Totals	20,594	2,481,940	2,067,304

Wax, Lard, Tallow, Etc.

PARRAFFINE WAX.—As a result of the scarcity of supply of the better grades of refined and general absence of offerings, prices hardened with the tendency upward, but no change in quotations was made, which were firm on basis of 5½@5¾c. for 120 melting point, according to terms of sale. Crude was quotably unchanged at 4@5c., according to quality and seller. Business transacted in refined was of a satisfactory volume considering the time of the year. The exports of paraffine wax for the past week amounted to 1,345,997 lbs., showing a decrease of 198,831 lbs. from those of the previous week.

TALLOW.—The market has been weak and prices have tended downward. Early in the week sales were made of 250 hhds. city at 4⅝c., 400 do. at 4½c., 700,000 lbs. prime packers in the West at 4⅝c., and 300,000 lbs. do. at 4.60c. At the close 4½c. was asked for city hhds., with 4¼c. best bid.

GREASES.—There is almost no demand either for export or for home consumption pending the unsettled condition of the tallow market. Small sales to cover current wants are reported of brown at 3¾@3⅞c. and good house and bone at 4⅛@4½c.

OLEO STEARINE.—No business of importance during the week; 7⅝c. asked, with 7½c. bid.

The Price of Lard at Chicago.

July.	Cash.	September.	October.
11	7.65 @7.70	7.85 @8.00	7.72½@7.80
13	7.40 @7.50	7.57½@7.77½	7.45 @7.62½
14	7.42½@7.45	7.50 @7.65	7.40 @7.55
15	8.50 @8.52½	7.60 @8.72½	7.47½@8.50
16	7.85 @7.95	8.00 @8.45	7.70 @8.00
17	7.85 @7.92½	7.92½@8.20	7.67½@7.80

(Special Correspondence to the Reporter.)

Chicago Seed and Oil Market.

Chicago, July 16, 1903.

There is but little change to be recorded in the market here from the letter of July 9. Quotations for July 10 were nominal. Cash offerings were either small or not in evidence, and speculative orders were absent. July 11 there was some trading in October deliveries at $1.01½, and on the 13th cash and near futures were from ½ to 1 cent lower. The market has been dull and no immediate change for the better is looked for. The market today fell off 2c. The government reports sent out under the direction of the United States Department of Agriculture for week ending July 13, from the principal flour growing States, are as follows:—

Iowa Section: "Considerable damage was done by high winds and local floods in storm-swept districts, but the percentage of loss of crops is not large."

North Dakota Section: "Early flax still continues good as a rule, and while not making rapid progress, is standing the drought better than any other grain; that sown late is just coming up, and the stand is generally thin and uneven, and it is not expected to mature."

Minnesota Section: "Early flax is in bloom; it is standing the drought better than the other grain; also the late sown barley and flax would improve a good deal with plenty of rain."

Kansas Section: "No mention made of flax, but private information to Chicago is to the effect that the crop is in fine condition, and harvesting will be commenced next week."

South Dakota Section: "Flax has generally done very well, and much of the crop is in blossom."

The general government crop report sent out from Washington July 10 states as follows:—"The acreage of flax is about 500,000 acres, or 13.5 per cent. less than that of last year, and the condition is 86.2. "This percentage may be, and probably is, figured correctly, but there is an error in regard to acreage.

RECEIPTS AT CHICAGO.

July 10.....9 cars
" 13.....12 cars
" 14.....small bag lot
" 15..6 cars and enough by lake to bring the total up to 112,996 bu.
" 16.....2 cars

RECEIPTS AT DULUTH.

July 10.....24 cars
" 13.....6 cars
" 14.....27 cars
" 15.....21 cars
" 16.....15 cars

RECEIPTS AT MINNEAPOLIS.

July 10.....8 cars
" 13.....26 cars
" 14.....11 cars
" 15.....13 cars
" 16.....21 cars

The market for cake is exceedingly dull, with a tendency to lower prices.

LINSEED OIL.—The market shows a slight decline. Owing to dullness, oil which was last week quoted at 35c. is now quoted at 34c., and has been offered as low as 33c. Buyers are not eager and are taking only such quantities as are absolutely necessary. On account of the willingness of parties to cut prices, even at this low basis, it is quite evident that the stock of oil and seed in crushers' hands is far in excess of consumptive demand. This is an incentive to unload as quickly as possible to make room for new crop, and in order to do so it is not unusual at this season to shade prices. There seems to be nothing in the situation to warrant higher prices in the immediate future.

LARD.—The market for the week has been an unsettled and speculative one, culminating on the 15th, when the market advanced 1.12½c., closing at 8.52½c., the highest price for the week dropping back to-day to 7.85c. The explanation for the advance was that a leading house had a stop loss order on a big line put out recently, and the trade took advantage of this fact to run the price up. The excitement did not last long and but little damage was done. The cash situation is absolutely unchanged.

STEARINES. — Market somewhat stronger. As high as 8¼c. is asked for prime oleo stearine, although several lots are quoted at 7¾c.; No. 2, 7¼c. Lard stearine nominally 1c. over cash lard. Mutton stearine, 8c.; tallow stearine,

5¼c.; grease stearine, 4¼c. to 5c., according to quality.

OLEO OIL.—For the past week the demand both here and abroad has been exceedingly light. Extra oleo oil quoted as in last letter from 7¼c. to 7⅝c.; at former price small sales were made. No. 2, 6¾c. to 7½c.; No. 3, 5½c. to 6c.; oleo stock, 6½c. to 7¼c.

TALLOW.—The market, although on the decline, is slightly easier and some large sales have been made. Edible is quoted at 5⅛@5⅜c.; prime packers', 4¾; No. 2, 3⅞@4c.; city renderers', 4⅛@4½c.; No. 2 country, 3⅞@4c.; B country, 4⅜c.; choice renderers', 4⅞c.

GREASES.—Stocks are not large and there is very little life in the market. Trading has been light, although a few large sales have been made. The following are the prevailing prices:—A white, 4¾@5c.; B, 4¼@4⅜c.; house, 3½c.; yellow, 3½@3⅝c.; brown, 3⅜c.; glue stock, 3½@3⅝c.; neatsfoot stock, 3¾@3⅞c.; bone, 3⅝@4c.

(Special Correspondence to the Reporter.)

Philadelphia Chemical Market.

Philadelphia, July 17, 1903.

ALKALI.—During the past week little of interest has occurred; with the shutting down of the glass factories and the strike in the textile trade, deliveries have been somewhat curtailed. Prices are firm, however, for both prompt and future deliveries, and some inquiry is noted for contracts extending over next year, for which holders are naming .80@.85c. for light 58 per cent. f. o. b. the works. There is no change in figures for spot goods. "B. M. & Co." is meeting with the usual jobbing demand, and is supplied at unchanged prices.

CAUSTIC SODA.—While little new business is reported, deliveries on contracts keep well up, in fact, better than is usually seen at this season. High test is quoted for prompt and future deliveries at 1.70@1.80c. f. o. b. works, as to quantity and dates of delivery.

SAL SODA.—Owing to the hot weather an increased demand is noted, and higher prices are now ruling, viz., .65@.70c., less usual discounts. Foreign is in good demand at .72½@.75c. for shipment, and .82½@.85c. on spot.

BLEACHING POWDER.—The market is somewhat unsettled owing to the free offerings of Continental makes for prompt delivery and nearby arrivals. Prices for prime English makes are well maintained at previous quotations.

NITRATE OF SODA—Soda is obtainable at 2.05@2.10c., and these figures are also named to arrive. Shipments are quoted at 2@2.05c., as to sailing date.

TRADE ITEMS.

The following guests from out of town were registered at the Drug Trade Club since our last report:—C. H. Rand, Indianapolis; H. B. McCord, Auburn, Ind.; Mr. and Mrs. G. B. Francis, London; Dudley W. Bury, Montreal.

The following has been received from the Ward Bros.' Drug Company, Indianapolis:—

It becomes our sad duty to announce the death of our honored president, Dr. Boswell Ward, which took place on Thursday, July 9, at Winona Lake, Ind. Born on May 29, 1831, at Rockville, Ind., in 1867 he laid the foundation here of the business which for thirty-six years has been connected with his name, and whatever measure of success this business has attained, is largely owing to his wise and conservative business methods and the confidence which his character inspired. An earnest Christian, his every business act was guided by the dictates of conscience, and his business life was a model of courtesy, probity and integrity. We shall miss his wise council as well as his kindly interest in every one connected with the house, and those associated with him as stockholders, directors and officers of the company, delight to pay this last tribute to his memory.

Patents Granted.

731,885—MACHINE FOR MANUFACTURING GLASSWARE. John F. Gegenheimer, Glassboro, N. J. Filed July 16, 1902. Issued June 23, 1903.

731,943—APPARATUS FOR CONTINUOUS FRACTIONAL DISTILLATION OF PETROLEUM. William D. Perkins, Oil City, Pa. Filed March 10, 1903. Issued June 23, 1903.

731,988—COTTON SEED HULLER. Frank A. Wells, Florence, Kans. Filed Oct. 23, 1902. Issued June 23, 1903.

732,090.—BLUE SULFUR DYE AND PROCESS OF MAKING SAME.—Ivan Levinstein and Herbert Levinstein, Manchester, England. Filed June 10, 1902. Issued June 30, 1903.

732,151.—PROCESS OF RENDERING LARD.—William B. Allbright, Chicago, Ill. Filed June 27, 1902. Issued June 30, 1903.

732,159.—APPARATUS FOR GENERATING FORMALDEHYDE.—Edgar F. Billings, Boston, Mass. Filed Oct. 17, 1902. Issued June 30, 1903.

NAVAL STORES.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 30.

Saturday Evening, July 18, 1903.

SPIRITS OF TURPENTINE.—The market continued to be firm, in sympathy with cables from Savannah noting 47¾c. bid and later 48c. bid. Early in the week holders were ready sellers of machines at 51½c. and oils at 51c. in yard, but in the absence of buyers, who still remained conservative, no large sales were effected. During the latter part of the week there continued to be a total absence of speculative interest and transactions were light, being wholly of a jobbing character at the outside range of quoted prices. There was no anxiety shown on the part of first hands to market their stocks in yard, which were light, and 51½c. for machines and 51c. for oils in yard and for nearby arrivals was named as positively lowest. It is generally believed by factors in Savannah and members of local leading firms that prices have reached their lowest level this season. Reports from Savannah to the effect that rumors in regard to Turpentine Operators' Association to endeavor to establish a minimum price at which spirits should be sold is receiving little attention here.

ROSIN.—Offerings of the lower grades were freely made and prices showed a weakening tendency. First hands named $2 for common and $2.02½ for good strained, in yard, but this failed to induce large buyers to take hold. Not above $2.10 for graded E and $2.25 for G, in yard, was obtainable. I was reduced 5c. to $3.10 in yard. Pale grades were very firm, owing to the continued scarcity of supplies in yard, particularly held by first hands. In response to firmer cables from Savannah noting an advance of 5c., the feeling among local holders was firmer and in many instances top prices for pale grades, in yard, were obtained. Fair sales in pales at full previous prices were made, and as high as $3.60 for graded M was obtained. Window glass also brought higher prices, ranging from $3.75@3.85 and water white sold at $3.99@4, all in yard. The close was firm but quiet.

TAR AND PITCH.—The market for tar was firm, but the demand was slow and sales included such lots as were needed to fill urgent wants. Offerings of parcels in yard at $4.45@4.50 for oils and $2.40@2.45 for regulars were made, resulting in no sales of importance. The demand for pitch continued to be moderate and prices remained steady. A sale of 200 barrels, in yard, at $1.75 by first hands was made.

The weekly statistical position of spirits of turpentine in barrels, in London for each year from 1900 to 1903, was as follows:—

	1903.	1902.	1901.	1900.
Stock July 4.....	7,626	17,922	8,280	12,930
Del'v'd this week..	2,970	1,876	2,555	2,358
Since Jan. 1.....	45,728	45,500	46,201	40,471
	s. d.	s. d.	s. d.	s. d.
Price July 6.....38 ..	34 1½	27 1½	33 3
Sept.-Dec. .....37 ..	34 1½	27 4½	33 9
Jan.-April 37 10½	28 4½	28 4½	34 9

Receipts and deliveries of naval stores for week ending July 17, 1903, were as follows:—

	Rosin.	Spirits of Turpentine.	Tar.
Stock in yard July 10, 1903.....	18,444	790	2,291
Receipts	4,167	1,526	356
Deliveries	3,299	1,574	388
Stock in yard July 17, 1903.....	19,312	742	2,259

STOCKS ON HAND.

	Spirits, bbls.	Rosin, bbls.	Tar, bbls.
New York, July 17.....	790	18,444	2,291
Wilmington, July 17....	730	24,163	8,239
Savannah, July 14.....10,316		61,640	.....

Charleston, S. C., July 17, 1903.

Turpentine steady at 47½c.; sales, 70 casks. Rosin steady; sales, 150 barrels. Quote:—A, B, C, $1.50; D, $1.55; E, $1.60; F, $1.65; G, $1.70; H, $2.20; I, $2.55; K, $2.70; M, $2.80; N, $2.90; W. G., $3.05; W. W., $3.30.

New Orleans, La., July 17, 1903.

Receipts—Rosin, 130 barrels; turpentine, 27. Exports to Glasgow—Rosin, 700; turpentine, 2,000. Belfast—Rosin, 400.

Savannah, Ga., July 17, 1903.

Turpentine firm at 48c.; receipts, 414; sales, 356; exports, 182. Rosin firm; receipts, 930; sales, 2,041; exports, 873. Quote:—A, B, C, D, $1.60; E, $1.65; F, $1.70; G, $1.80; H, $2.30; I, $2.75; K, $2.80; M, $3; N, $3.10; W. G., $3.20; W. W., $3.40.

Wilmington, N. C., July 17, 1903.

Spirits turpentine firm at 48c.; receipts, 94. Rosin—Nothing doing; receipts, 119. Crude turpentine firm at $1.75, $3 and $3.75; receipts, 765. Tar firm at $1.65; receipts, 52.

Liverpool, July 17, 1903.

Turpentine steady, 39s. 3d. Rosin—Common quiet, 5s. 3d.

London, July 17, 1903.

Turpentine—Spirits, 37s. 6d. Rosin—American strained, 5s. 6d.; fine, 8s. 9d.

If you desire to be brought in contact with the makers of machinery which enters into the manufacture of chemicals, drugs, paints, dyestuffs, fertilizers, naval stores, varnish, white lead, cotton oil, linseed oil, lubricating oil, etc., we would respectfully refer you to the Machinery Department of this publication, which you will find on page 23. Any special information that may be desired will be gladly furnished upon application, for we are in a position to place prospective purchasers in direct communication with the manufacturers of machinery of all kinds.

INDEX TO CONTENTS.

EDITORIALS:
- Very Small Opium Crop 7
- Improved Position of Quinine 7
- Decreased Exports of Lard and Tallow 7
- June Petroleum Statistics 7
- Firm Market for Shellac 7
- Prime Lard Oil Lower 7

TRADE ITEMS 8, 22

PETROLEUM NOTES 8

OBITUARY:
- Stephen Parlin 9

MISCELLANEOUS:
- Regulating the Sale of Indian Petroleum Lands 9
- Standards of Purity 9
- Milk Albumen Free of Duty 9
- New Corporations 9
- Awards for Treasury Department Supplies 9
- Comparative Stocks of Lard 10
- The Art of Sampling Rosins 10
- Reappraisements of Importations 10
- Patents Granted 22, 55
- Cardomoms 24
- Production of Metallic Resinates and Oleates 24
- Petroleum Hunting in Mexico 27
- Method of Standardizing Permanganate of Potash 27
- Palm Oil Trade of Lagos 28a
- Exports from New York 28b
- Petroleum Fuel for Ships 28c
- Problems in the Fat Industry 28d
- London Linseed Market 28d
- Alleged Lead Ore Duty Frauds 28d
- Production of Magnesite 28d
- Exports of Lard, Etc., for June 29
- Calculations for Manufacturing Processes 29
- Variable Prices for Petroleum in London 34
- Production of Asphaltum 34
- Petroleum Pipe Line Statements for June 42
- Petroleum Exports for June 42
- Foreign Mails 47
- English Petroleum Markets 50

MARKETS:
- Paint Market 11
- Oil Market 19
- Chicago Seed and Oil Market 21
- Philadelphia Chemical Market 22
- Naval Stores Market 22
- Petroleum Market 28
- Drug Market 35
- Chemical Market 49
- Dye Market 54

MORITZ & PINCOFFS,
HAMBURG, GERMANY,
AGENTS AND COMMISSION MERCHANTS,
Cotton-Seed Products, Oil, Greases, Oil Cake, Oil Seed, etc.
Highest References. Correspondence Solicited

Benjn. R. Vickers & Sons,
LEEDS, ENGLAND,
Exporters of
ENGLISH DEGRAS
Degras Oil, Recovered Oils and Greases, Rapeseed Oil, Castor Oil, Candle Tar, etc.

E. F. DUGGAN,
BROKER
COTTON SEED PRODUCTS
DALLAS, TEXAS.

WANTS.

SPECIALS OR NOTICES in this column are at the rate of Two Dollars for each insertion for eight lines or less. All over eight lines Twenty-five cents per line of about six words. The full amount in cash must accompany all orders.

POSITION WANTED.

Leadburner, 16 years' experience, wishes position on new building, or steady place. Address "LEADBURNER," care of this paper.

POSITION WANTED.

A man thoroughly equipped to sell chemicals and pharmaceutical preparations to the jobbing trade is open for employment. Has had extensive experience and enjoys personal acquaintanceship with substantially every concern connected with the drug trade west of the Allegheny Mountains. Address "Box 10," care of this paper.

POSITION WANTED.

I desire to find a position for a high-class chemist and mechanical engineer (age 40) of large and valuable experience, having been employed by me temporarily. Address S. S. Box 1120, Boston, Mass.

POSITION WANTED.

A chemist, graduate, desires position. Many years' experience in the manufacture of sulphuric, nitric, muriatic and mixed acids, alums, glauber's salt, ammonia, salt cake, etc., and specialties; designing and building plants; also large experience in analytical and laboratory work. Address M. E., care of this paper.

WANTED.

Superintendent for paint factory. An excellent opportunity for an up-to-date man; one with executive ability preferred. Address "SUPERINTENDENT," care of this paper.

WANTED.

A competent man to sell dry paints and colors. Address, stating experience, age and salary wanted, B. H. W., care of this paper.

OFFICE MANAGER,

Auditor, accountant, correspondent, expert accountant, experienced and successful manager, desires permanent or temporary position to open, close books, straighten out entangled accounts or adjust partnership matters. First class credentials as to business capacity and personal standing. Address "ACCURATE," care of W. Losee, 297 6th ave., Brooklyn, N. Y.

WANTED.

Salesman to sell paint machinery; man familiar with machinery, who has had selling experience; give reference and full particulars in first letter. Address Box L, Station B, Cincinnati, O.

MIXED PAINT MAN

A good shader wanted to take charge of liquid paint department. Address C., P. O. Box 1,994, N. Y.

J. R. C. BOYER
COTTON OIL
Cotton Seed Soapstock, Etc.
MEMPHIS, - - TENN.

CARLETON ELLIS,
CHEMICAL EXPERT
Specialist on Chemistry of Oils, Paints, Varnishes and Waxes.
30 PORTLAND ST., - - BOSTON, MASS.

NAEGELY & CO
MARSEILLES, FRANCE.
Importers and Distributors of
American Cottonseed Oil.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

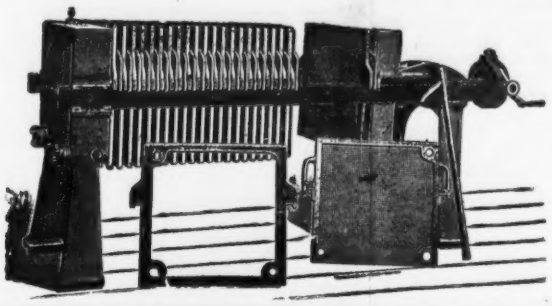
Established 1829
W. A. ROBINSON & CO.
Sperm, Whale, Menhaden, Sea Elephant Oils, Spermaceti
New Bedford, Mass.

Machinery Department.

The advertisements which appear in this department are those of Manufacturers, and they all will send catalogue and full information upon application.

It is requested that all inquirers mention the fact that the name was taken from the MACHINERY DEPARTMENT of this publication.

If any of our readers are contemplating the purchase of machinery we will be pleased to place them in direct communication with the manufacturers.



The "Johnson" Filter Press

WE MAKE A SPECIALTY OF PRESSES FOR FILTERING

All kinds of Oils, Colors, Varnishes, White Lead, Clay, Whiting, Starch, Sugar Chemicals, etc. Also Steam and Power Filter Press Pumps, Filter Cloth and Filter Paper.

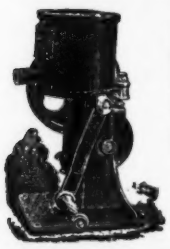
John Johnson & Co.

1 Franklin Square, NEW YORK CITY

The Patent Plate saves cloths, produces a dryer cake, and is altogether better than the old form. WRITE FOR INFORMATION.

D. R. SPERRY & CO.
MANUFACTURERS OF
VACUUM PANS, STEAM JACKET KETTLES, CALORONS, Etc.
BATAVIA, - ILL.

Laboratory Centrifugal Cyclone.



"The latest, the best, and the only laboratory machine having the same efficiency as the large factory centrifugal. Bronze or Steel Basket. Speed of 5,000 revolutions per minute. Write for descriptive pamphlet and prices to"

C. H. CHAVANT & CO.
Chemical Engineers,
117 Danforth Avenue,
Jersey City.

"In all the land, range up, range down,
Is there ever a place so pleasant and so sweet?"

THE THOUSAND ISLANDS.

There may be somewhere on the earth a more delightful region than that of the Thousand Islands, but if there is, it has not been discovered. It is as fine as the Bay of Naples, with 2,000 picturesque Islands scattered along the twenty-five miles of one of the most beautiful rivers in the world. You can find out a great deal regarding it in No. 10 of the "Four-Track Series," "The Thousand Islands;" issued by the

NEW YORK CENTRAL.

A copy will be mailed free on receipt of a two-cent stamp, by George H. Daniels, General Passenger Agent, Grand Central Station, New York.

FILTER PRESSES

WILLIAM R. PERRIN & COMPANY, CHICAGO NEW YORK

PAINT MILLS and MIXERS

3 Sizes HAND MILLS
4 Sizes POWER MILLS
PONY, LIQUID and SEMI-PASTE MIXERS
Strong, Durable and Nicely Finished

GANG MILLS, 2 to 6 on a Bench.
INK MILLS with Wide Grinding Surface

WATERVILLE FOUNDRY & MFG. CO., WATERVILLE, N. Y.

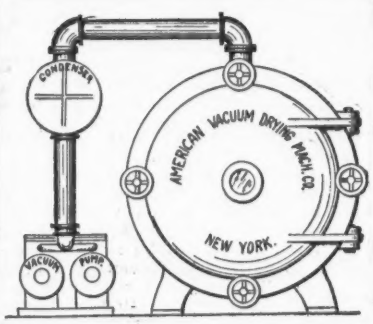
NEW AND SECOND-HAND

Grinding, Pulverizing and Sifting Machinery

BOUGHT AND SOLD.

Machinery Installed. Plants Remodeled with Modern Time and Labor-Saving Equipment.

THE CHARLES MILL SUPPLY CO., 15 SOUTH WILLIAM STREET, NEW YORK.
Telephone 3057 Broad.



Vacuum Drying Apparatus

BUILT IN SIZES AND STYLES TO SUIT REQUIREMENTS.

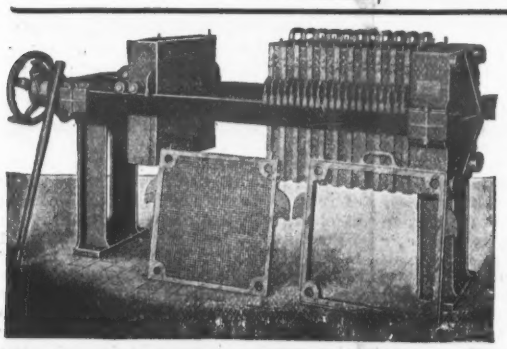
Most Rapid Drying: It accomplished in a few hours, where many days and weeks are required in ordinary drying rooms.

Saving in Fuel: Exhaust steam or hot water may be used for heating, since the drying in vacuo can be done at as low a temperature as 53° F.

The consumption of steam is only 1¼ pounds for each pound of water evaporated from the material, and this includes the steam necessary for operating the vacuum pump, provided the exhaust steam from the pump is utilized.

No other process of drying is so economical, and saves so much time and space.

AMERICAN VACUUM DRYING MACHINE CO.
NEW YORK OFFICE, 120 Liberty Street.



SHRIVER FILTER PRESSES

For Filtering COTTONSEED OIL, LINSEED OIL, VARNISH, COLORS, WHITE LEAD, WHITING, CLAY, STARCH, GLUCOSE, SUGAR, LARD OIL, TALLOW, CHEMICALS, etc.

Special Bronze Presses for filtering acid liquors. Small experimental Filter Presses for laboratory use.

Filter Press Pumps, Filter Cloth and Filter Paper.

T. SHRIVER & CO.

341 East 56th Street, NEW YORK CITY

IMPROVED AUTOMATIC

Dryers,

COOKERS,
PRESSES and
DIGESTERS,

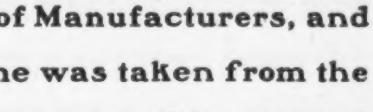
For MECHANICAL TREATMENT of all MATERIALS

American Process Company,

62-64 William St., New York

WOOD WATER PIPE

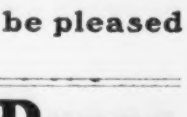
FOR CONVEYING CHEMICALS (ACID-PROOF).



PATENT WATER-PROOF STEAM PIPE COVERING

For Underground Steam Pipes.

Send for Catalogue and Price List.

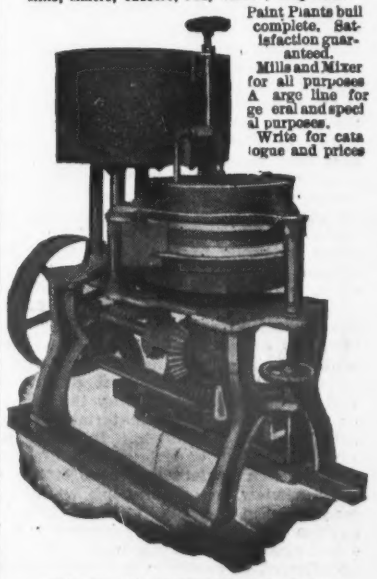


A—Tin Lining.
B—Asbestos.
C—Wood.
D—Corrugated Paper.
E—Wood.
F—Asphaltum Coating.

A. WYCKOFF & SON CO.,
110 E. Chemung Place,
ELMIRA, N. Y.

THE CELEBRATED KAESTNER WESTERN MILL AND MIXERS.

Mills, Mixers, Chasers, Pony Mixers, Drug Mills.



Paint Plants built complete. Satisfaction guaranteed.

Mills and Mixer for all purposes A arge line for ge eral and speci al purposes.

Write for cata logue and prices

CHAS. KAESTNER & CO.,
241 to 251 So Jefferson Street CHICAGO, IL

Cardamoms.

The cultivation of cardamoms is being extended in many up-country districts and nearly 10,000 acres of forest are now occupied with this product in Ceylon. Hitherto planters have adopted the "stool" method of cultivation, and effected the curing by means of sunlight and fumes of burning sulphur. There are few products which lend themselves better to experiment, both in methods of cultivation and curing, and the following plots have been arranged with these objects in view. The time of planting and condition of plants when put out was very unsatisfactory, and much replanting will have to be done in these plots.

In Ceylon there are two forms in cultivation, distinguished respectively as the Mysore and Malabar varieties. There is much confusion as to the equivalent of these varieties with those in India, and many assert that the names as applied in Ceylon are reversed in India. In order to avoid further confusion it will be necessary to define the characters of the varieties chosen.

The Mysore cardamoms are characterized by a larger habit, glossy leaves, and usually erect inflorescence; the fruits are elongate and rately cornered.

The Malabars are characterized by a layer of silky hairs on the under surface of the leaves, a trailing inflorescence, and a more globular and shorter fruit than the Mysore.

The most striking difference is in the erect inflorescence of the Mysore, as against the trailing flower system of the Malabar variety.

The other characters form a continuous series of variations, and the two kinds of cardamoms cannot be regarded as anything but varieties of the same species. From examination of the development and form of the fruit it occurred to me that the Mysore variety was probably the more advanced form in cultivation; the stages presented in the development of the fruit of the Malabar variety were observed in the Mysore variety, but the latter proceeded one stage further, giving a fruit more elongate in outline.

In order to determine the relation of the varieties recognized in Ceylon as "Mysore and Malabar," specimens of the true "Mysore" of India were obtained from an experienced Mysore planter. These have been planted in a separate plot.

The wild cardamom (Elettaria Cardamomum, Mat.) is said to be common in the wet forests of Ceylon up to 3,000 feet. It can be distinguished from the cultivated varieties by its short and sparsely flowered inflorescence, and when opportunity occurs a plot will be established. It may be possible to improve the Ceylon wild form, and efforts will be made in this direction.

Many natives in Ceylon class several species of Amomum as "wild cardamoms." In the Matale district Amomum petrocarpum, Thw., and A. floribundum, Thw., are thus regarded. Up to the present no attempts have been made to cultivate these species, though the seeds of the former are decidedly aromatic. The genera Elettaria, Mat., Amomum, L., are so closely allied that it would appear reasonable to expect profitable results to follow from the experimental cultivation of the aromatic species of Amomum.

The only form of cultivation in vogue in Ceylon is the "stool" system. The bulbs are planted two together or one double bulb per hole, the holes being 7 to 8 feet apart. In 4 to 6 years a clump or stool of plants is produced measuring 3 to 4 feet in diameter. The stool increases in size from within outwards; the old bulbs occupying the central position gradually die down. Such a method of cultivation has been found to yield profitable results and has been adopted by most cardamon planters in Ceylon. It is, I think, accompanied by several disadvantages. In the first case the stools occupy a limited area, and the roots of the few score of bulbs in each stool have to obtain their nutrition from the immediate neighborhood. The roots often extend several feet beyond the stool, but the large space between the stools is rarely drawn upon to any great extent. The stools being in lines along hillsides, it is obvious that the rains will successfully carry away the greater part of the soluble materials in the soil between the stools. In order to prevent this an experimental half-acre plot of each variety has been laid out with a view to establishing what we may call the "terrace" system. In this system single bulbs have been planted 4 feet apart, and their growth will only be allowed to continue in the direction of lines running at right angles to the slope of the hill. The lines will be kept at from 2 to 3 bulbs wide.

By this means the whole of the materials washed down the hillsides by the rain will become lodged along the lines of cardamons, and as their root system will extend upwards and downwards there ought to be minimum loss of nutritive materials.

The original number of plants in these plots is the same as in those which are being cultivated on the "stool" system, the only difference being that they are planted singly 4 feet apart instead of in pairs of 8 feet apart.

In the second place the stool method lends itself to the establishment of many fungi, myxomycetes, etc.:—in consequence of the crowded nature of the plants preventing the access of light on the lower part of the bulbs. In the terrace system the light will have easier access to the bulbs, and may consequently keep fungi in check.—Times of Ceylon.

Production of Metallic Resinates and Oleates.

In the production of linseed oil varnishes the fact is more and more recognized that the metallic resinates and oleates, but especially the former, incorporated with the linseed oil, satisfy perfectly the requirements for an ordinary paint coating and that there is no longer any need of boiling linseed oil for a long time with oxides of lead or manganese or their salts. It is sufficient to incorporate comparatively slight quantities of the resinic and oleic compounds of the metallic oxides by simple admixture with the linseed oil at ordinary temperature or possibly raised to 140 or 150 deg. C. to obtain varnishes which, according to the nature of the metallic compounds, dry in 6 to 15 hours. The period of 6 or even 5 hours may be taken as the lowest limit of the drying of an application of varnish on a hard non-drying surface (glass, metal, etc.), while 15 hours is the maximum period inside of which a varnish coating should dry. Varnishes which require more than 15 hours for drying no longer satisfy the present requirement, the more so since there are body colors capable of decreasing the drying capacity of the varnish, while none—not even white lead and red lead—can enhance that of 6 hours. While it was known through experience that lead and manganese exercise the best drying action upon linseed oil, it was attempted to make use of other metallic oxides, such as copper, iron, zinc, etc., outside of the resinates and oleates of lead and manganese, but the trials made have demonstrated the inadaptability of all metals, except lead and manganese, in such a striking fashion that they have been entirely abandoned, nor do they offer any advantages as regards price.

Among the products of this class occurring in commerce are the following:—Melted lead resinate, melted manganese resinate, melted lead-manganese resinate; also precipitated lead resinate and precipitated manganese resinate. These products are distinguished on the one hand by the mode of production and on the other by the varying mode of application and solubility due to their form. In order to obtain molten metallic resinates, colophony is melted and then the lead or manganese compound entered with continued heating and increase of temperature until a reaction sets in, which manifests itself first by a thickening and later by greater liquefaction; then the new product is merely allowed to cool.

The precipitated resinates on the other hand require a somewhat longer process, consisting in dissolving the rosin in lye, dissolving the requisite lead and manganese salts in water and uniting the two solutions to precipitate the new compound out. The latter has to be washed repeatedly with water to remove the foreign ingredients, whereupon it is squeezed out by means of filter process and dried, with subsequent grinding in certain cases. Hence the process is not only more laborious and complicated, but certain equipments are necessary which materially increase the cost. The difference as regards the use and application of the two kinds of preparations consists in that the solution of the melted compounds is practicable only with the aid of higher temperatures, while the precipitated ones will dissolve readily and quickly without the employment of any heat whatever. In oil of turpentine, however, the melted resinates, if ground, will dissolve without heat, but more easily if they are heated with a little turpentine oil and the remaining oil of turpentine is added after the solution has been accomplished. The precipitated resinates of lead and manganese are only in very rare cases completely soluble in turpentine oil, for which reason they enter less into consideration in the preparation of driers.

Lead Resinate by Melting.—In a corresponding kettle 150 kg. of resin is melted until it becomes thinly liquid, and then 18 kg. of litharge, very finely pulverized, is gradually added in small portions with continual stirring. It is absolutely necessary to stir continually the molten mass of resin, and the lead oxide, which settles to the bottom easily because of its weight. In case this is not done, on the one hand the lead-oxide would be burned onto the bottom, on the other hand the colophonic acid would not unite sufficiently with the lead-oxide, and through this of course an inferior product results. The stirring must be continued until the lead-oxide has completely united with the resin; then it is allowed to cool or is poured out into pots or vats, in which the new product, which is distinguished from the crude resin only by a darker color, is allowed to become cool.

Lead Manganese Resinate by Melting.—This product is probably demanded by individual consumers, yet its use is less rational than that of the simple lead or manganese compound. Furthermore by using one of the two above mentioned compounds either a lead or a manganese compound can subsequently be added to the varnishes; in this a part of the compound originally used is disengaged and is replaced in the varnish by the other compound. In the production of the lead-manganese resinate one has it entirely in his power to attain a compound with a greater proportion of lead resinate or of manganese resinate, according as the lead or the manganese compound is allowed to predominate. The process is exactly the same as in the case of the products containing only lead or only manganese, but in every case the lead preparation must first be introduced and then the manganese preparation. A good result is produced by 150 kg. of resin, 6 kg. of pulverized litharge and 2 kg. of manganese dioxide, or 150 kg. of resin, 3 kg. of litharge and 4 or 5 kg. of manganese dioxide.

Manganese Resinate by Melting.—In the preparation of this product, which may also be obtained by dry process by means of melting, a manganese of very high percentage can be used as well as manganese dioxide obtained by precipitation. This latter, however, yields a far better product than native manganese ore, because the ore always contains substances that do not unite with colophonic acid and are, therefore, without effect, and furthermore occasion quite a sediment, when the new compound is dissolved in turpentine or linseed oil. One hundred kg. of colophony is set boiling in a corresponding kettle sufficiently large, is heated a while longer in order to drive out any water that may be present, and then by degrees 6 parts (by weight) of manganese or 5 parts (consequently kg.) of brown manganese dioxide are introduced with continued stirring. Here, too, a rising of the melting mass of resin takes place, and it must always be stirred down vigorously and some time allowed to pass before a fresh quantity of the manganese compound is entered.

As the molten mass takes a very dark color from the black coloring of the manganese, and one cannot tell by simple observation of the running of the mass off the stirrer whether it has become clear—at any rate for quite a while after the entering of the last quantities of manganese—some of it must be placed upon glass. The black color, which is due to the manganese, must completely disappear and the final product become fairly dark, but clear and transparent.

A process that has stood the test of practice is as follows:—The resin is melted and one begins with the entrance of the chemicals at 150 deg. C.; the temperature can be raised by degrees to 200 deg. and even 220 deg. C. The metallic compound must be added gradually and with continued stirring, and a fresh quantity entered only when the resin mass has fallen back. When everything has been entered it must be stirred and the mass pushed down from the walls of the vat, until the foam has fallen, and only a thin layer of it remains on the surface, and the clean bottom of the kettle can be felt with the stirrer. Ten kg. of hydrated manganic oxide is required for 100 kg. of colophony. One can make this latter product himself and has only to see to it that manganic salt is present in excess, and that any excess of lye is avoided. Five hundred and ten kg. of manganous chloride solution of 14½ deg. Be. is heated to 80 deg. C., and then 180 kg. of caustic soda lye of 25 deg. Be., likewise heated to 80 deg. C., is allowed to run in, during constant stirring, and heated to boiling. Then the precipitate that is obtained is filtered through cloth, pressed as far as possible, dried by a very gentle heat and then reduced to a very fine powder.

Good molten resinates may also be produced with the following proportions:—

Lead Resinate.—200 kg. colophony and 60 kg. of pulverized litharge.

Lead Manganese Resinate.—250 kg. of colophony, 45 kg. of pulverized litharge entered at 240 deg. C., and the reaction awaited, then 5 kg. of gray manganese entered at 200 deg. C., the reaction awaited, and 20 kg. of resin oil added.

Or 200 kg. of colophony, 20 kg. of precipitated metallic lead, 4 kg. of manganous borate.

The production of the metallic resinates by means of precipitation from solutions is based, as has already been remarked, on the treatment of an alkaline aqueous solution of resin with the solution of the chosen metallic salt. On the whole this process also seems quite simple, but in reality it is not so, because various circumstances can combine to render difficult the attainment of an easily soluble product. It is also of importance in dissolving the resin, consequently in the formation of the resin soap, to calculate exactly the amount of caustic soda requisite in each case and then to bring it into use. Resin consists especially of acids and few anhydrous acids (abietic acid, sylvic acid, dextronic acid and laevospimeric acid) and a few unsaponifiable constituents. The composition varies in accordance with its place of origin, Austrian and American colophony being particularly distinguished from each other, and on account of this varying composition the quantity of alkali that is requisite for complete saponification is not, as is the case with one and the same kind of fat, as, for example, beef tallow or olive oil, alike within slight fluctuations, but varies a great deal. The quantity of caustic potash in milligrams that is required for the complete saponification of a gram of fat is called its saponification number, which is quite different for the different kinds of colophony. The saponification index of colophony is determined in the following way:—

About 1 gram of pulverized resin is heated for half an hour on the water bath with 20 ccm. of about a ½ n. alcoholic potash lye (so-called Kottsdorfer lye) in a wide necked flask holding about 100 ccm., which is closed with a cork, through which passes a tube 1 m. long, while a second so-called "blind" test is made at the same time in a similar manner, but without resin. The contents of bath flasks are titrated with ½ n. hydrochloric acid; the difference between the two factors is expressed by that quantity of alkali that corresponds to the amount used of the resin. The following example may serve for a more particular explanation:—1.05 g. colophony dissolved in 20 ccm. of potash lye consumes 15 ccm. of ½ n. HCl, while 20 ccm. of NKOH in itself corresponds to 21 ccm. of ½ n. HCl 1.05 g. of resin = 6 ccm. of ½ n. HCl = 6X0.028 = 0.168 g. of KOH.

The saponification number is therefore $\frac{168}{1.05} = 160$. In order then to calculate this saponification index for any quantity of caustic soda that is necessary for the production of a neutral resin soap, the following proportion serves:—X = 56:40; X = 114.3.

1 kg. of the resin investigated needs 0.114 g. of caustic soda for complete saponification. For the production of a resin soap the following directions are given:—300 kg. of resin are melted at from 150 to 160 deg. C. and then 30 kg. of caustic soda dissolved in from 15 to 20 times that amount of (heated) water is entered. It is allowed to stand 14 days, during which time a dark lye is formed upon the surface, which is drained off. The resin-soap must then be dissolved in hot water, and in this way a pure neutral solution is obtained for precipitation with the lead or manganic salt; in the liquid drawn off are contained the unsapcnifiable constituents of the colophony. As a rule, however, such a neutral resin-soap is not produced in the above manner, but the resin-soap solution, which contains the unsaponified matter together with free caustic soda, is generally obtained by solutions of resin in caustic soda lye (on account of cheapness, not caustic potash).

Precipitated lead resinate is produced in the following manner:—200 kg. of colophony is placed in a kettle with 320 kg. of water and 30 kg. of a 77 per cent. caustic soda, and boiled until the resin is fully saponified and a clear solution of resin-soap is formed. Be-

sides 200 kg. of lead acetate is dissolved in 840 kg. of water at 100 degrees C., into which solution the resin-soap solution is then poured, whereupon thick masses of lead resinate are precipitated. These are filtered off, washed with hot water and dried. The statements made here are on the whole correct, but for example, the resin is not easily and quickly saponified in this way, because the resin melts in the boiling lye before it reaches saponification, so that it is then almost impossible to let the lye so thicken that it unites with the resin to form soap. On that account the pulverized resin must be entered into the boiling lye gradually in small amounts, according to the proportion of the solution that is being made, stirred constantly, in order to bring fresh quantities of lye in contact with the resin, and fresh amounts of the resin are entered only after the solution has become clear. This is very important, in order that there may be in the resin-soap no unsaponified colophony, which is without effect in the finished product and does not dissolve when united with linseed oil without an increase of temperature. After the resin-soap solution has been obtained, it must be allowed to cool to 50 or 60 deg. C., and is then slowly mixed with stirring with the solution of lead acetate, which is also warm. At the combination of the two solutions in boiling condition the precipitate is formed in the shape of masses clinging together more or less, which, on cooling, may be broken up into pieces; if, however, the solutions are cooled still more, a fine powder results; consequently such a form of the product as is desired. The solution of lead acetate is, if mixed with ordinary water, muddy, on account of the reacting mineral substances of the water, and such a solution must be allowed to settle, or, better and quicker, filtered and the mud that is deposited or that remains behind removed. If a muddy solution of lead acetate is used for precipitation the precipitated compounds that are not dissolved in the water would remain in the lead resinate and would be the cause of incomplete solubility. As can be seen, apparent trivialities, if they are not recognized, injure the utility of the final product very much.

For manganese resinate in precipitated form similar resin-soap is prepared and should then be precipitated with a solution, as free from iron as possible, of 75 kg. of manganous chloride. The following is a practical direction, which has been thoroughly tested, for the production of precipitated manganese resinate, completely and clearly soluble in linseed oil, turpentine oil and benzine:—100 kg. of colophony with 35 kg. of caustic soda-lye, 25 deg. Be., are diluted with 345 kg. of water, boiled until the yellow resin foam appearing on the surface is as well dissolved as possible, then during constant stirring 620 kg. more of water are entered, until there is in all 1,000 kg. of liquid in the kettle; the water that evaporates should be replaced until everything has been dissolved. Now, a solution of manganous chloride, also hot, is allowed to run into the resin solution with constant stirring, until all the resin is combined and shows an excess of manganese. For this 200 kg. of manganous chloride of 14½ deg. Be., i. e., 55 kg. of manganous chloride in crystals, are necessary in 250 kg. of water. The mass, which at first is very thick and can hardly be stirred, becomes thin again after everything has been entered and the whole heated to the boiling point, whereupon the water is drawn off and the compound washed twice with fresh water. The product is now freed from water as much as possible in a press, dried and pulverized. Manganous chloride should be free from iron, and the water used in its manufacture must give no precipitate when mixed with alum.

The metallic oleates have, unlike the resinic products, been in practical use in the lacquer and varnish industry for quite a long time, and upon them are based the old methods of production of the linseed oil varnishes, and in particular of the linseed oil drier or, in short, drier. In the preparation of linseed oil varnishes with lead and manganese compounds, a part of them is combined with the oleic acid, and this compound is at once dissolved again in linseed oil. In the preparation of the drier relatively little linseed oil is heated with much lead or manganese compound, and thus the whole mass of the oleic acid is combined with this, so that a solid or almost solid mass is produced. This solid mass is the oleate, which may be easily dissolved in linseed oil and oil of turpentine. The metallic oleates, therefore, can be simply produced by a corresponding heating of linseed oil with litharge, red lead, manganese, pure manganic oxide or manganese compounds, in which it is again important to enter into the oil just so much of these metallic compounds as is necessary to combine the oleic acid and to convert it into a dischylon-plaster (lead plaster). It is also necessary in the manufacture of these products, that they are perfectly soluble in linseed oil or turpentine, which, however, cannot be the case if they do not contain metallic oxide in combination, with an excess of metallic oxide they exhibit no greater or less drying power, to be sure, but, of course, this is considerably reduced if they contain free oleic acid. The disadvantages are, therefore, in the first case, slight solubility, in the latter, diminution of the capacity of transferring siccative power to the linseed oil, so that in consequence more of the oleate must be employed to produce linseed oil varnish. The metallic oleates are pretty solid, but not brittle and fragile (or so only in temperatures below the normal); usually they cling closely together and form shapeless masses that cannot be pulverized.

For the production of lead oleate by means of melting or heating (these products may be produced also by precipitation), 7 parts of linseed oil with 2 of litharge (pulverized), and the same quantity of red lead, are heated in a kettle, which must have a capacity at least five times as great as the quantity to be taken, until the original red color has changed to dark brown, at which process the mass rises, bubbles and develops ill-smelling vapors. If the reaction (the formation of the oleate) has taken place, a sample of the mass, placed upon a plate of glass, should become hard and brittle on cooling (even at 15 deg. R. it is somewhat greasy), and be perfectly transparent when it is spread out into a thin layer. If these distinctive marks do not appear, the heating must be continued.

Litharge and red lead can be taken in varying proportions, and it must be remarked that red lead always produces a darker color than litharge. One or the other of the two lead oxides can also be replaced, in whole or in part, by melted lead acetate, free from water. For the preparation of manganese oleate the process is just the same except that maganese, manganese dioxide and manganous borate are used in corresponding proportions, which are easily discovered by practice. On heating the masses become black or yellowish-white, respectively, and they must generally be heated quite a while longer in order to produce the combination of the oleic acid with the metallic oxide.

The following directions are given for products obtained by wet process:—In the first place, a linseed oil soap is produced by heating 100 kg. of linseed oil with a solution of 77 per cent. caustic soda (15 kg. of caustic soda with from 150 to 225 kg. of water), and the water evaporating must be constantly renewed. When the linseed oil soap solution has boiled perfectly clear, it is precipitated with a solution of lead acetate (60 kg. in from 150 to 200 kg. of water) poured in slowly, the water poured off, and the new compound washed repeatedly with water and finally dried. If instead of acetate the same amount of manganous chlo-

THERE IS NO UNIVERSAL ELEVATOR OR CONVEYOR

LINK-BELT ELEVATORS. CONVEYORS

are practically as varied as the work to be done.

Special devices for handling boxes, barrels, grains, bulk materials, etc.

LINK-BELT ENGINEERING CO.

NICETOWN, PHILADELPHIA.

NEW YORK: 49 DEY ST. PITTSBURG: PARK BLDG. CHICAGO: LINK-BELT MACHINERY CO.

MISSOURI PACIFIC RAILWAY

The Colorado Short Line

...FROM...

St. Louis and Kansas City

Via the Pueblo Gateway

—TO—

COLORADO, UTAH AND THE PACIFIC COAST

Observation Parlor Cafe Cars, meals a la carte and elegant Pullman service, electric lights and fans. Double daily service. The scenic line through Colorado. Through service to California.

THE IRON MOUNTAIN ROUTE

reaches direct from St. Louis, the cities of Memphis, Hot Springs, Ark., and principal points in Texas, Mexico and California. Elegant through service and Dining Cars, meals a la carte, and Pullman Sleeping Cars with electric lights and fans.

For further information apply to

W. E. HOYT, G. E. P. Agent,

1335 Broadway, New York.

AMERICAN CAN COMPANY

MANUFACTURERS OF TIN CANS,

Sheet Metal Packages,

FOR THE

Paint, Oil, Varnish and Drug Trades

EVERY STYLE AND VARIETY.

Formerly manufactured by th. 118 Different Branches of this Company.

As we have the latest and most improved facilities for manufacturing our goods, and unlimited capacity for turning them out promptly, we are confident that we can supply the trade with goods of the highest grade of excellence on short notice.

As our plants are located all over the United States, we fill orders from the factories nearest to the points of deliveries, thereby insuring prompt and satisfactory service.

General Offices, Bowling Green Bld'g, New York.

USE

Faust's Modern Paint Machinery

THE FAUST MACHINE WORKS, 111 8th St., Brooklyn, N. Y.

We Pulverize EVERYTHING, Including Coal, Zinc, Lead, Sulphur, Paint Materials, Phosphates, Rock, Copper Oxide, Etc., Etc.

We Make Fifteen Different Sizes of Pulverizers and Separators

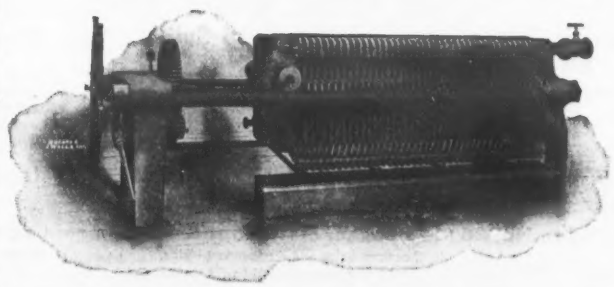
Which are adapted to any and all materials. Our Machines are far superior to all others and are now in daily use by the STANDARD OIL CO., New York; PITTSBURG REDUCTION CO., Pittsburg; SHERWIN WILLIAMS & CO., Cleveland, and many others, to whom we refer.

Our Patent Air Separator is a Wonderful Invention and Saves Time and Money.

Write for catalogue and correspond with us.

Raymond Bros.' Impact Pulverizer Co., 143 Laflin Street, CHICAGO.

Smith-Vaile Filter Presses



for Clarifying Varnish, Glycerine, Inks, Cottonseed, Linseed and Castor Oils, etc., etc.; also Special presses to suit the business for which they may be required. We also make

STEAM AND POWER PUMPING MACHINERY FOR ALL PURPOSES,

JET AND SURFACE CONDENSERS,

STILWELL'S FEED WATER HEATERS and

COTTON AND LINSEED OIL MACHINERY.

The Stilwell-Bierce & Smith-Vaile Co.

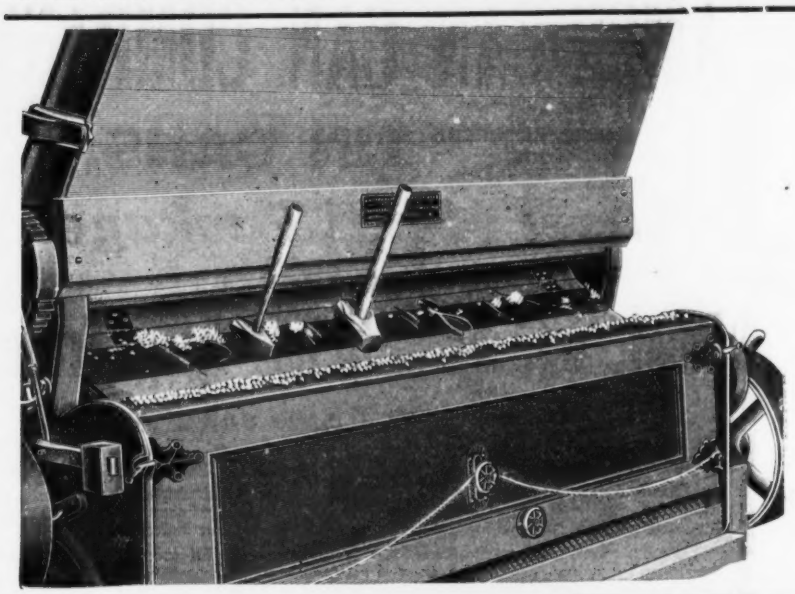
315 Lehman Street, DAYTON, OHIO.

The only commercially successful COTTON SEED DELINTER in existence is the

BAXTER DELINTER

Patented in THIS COUNTRY and ALL OTHERS using or growing cotton seed. Beware of imitations as we will prosecute infringers and users of infringing machines to the full extent of the law.

AMERICAN MACHINERY AND CONSTRUCTION COMPANY, VICKSBURG, MISS., U. S. A.



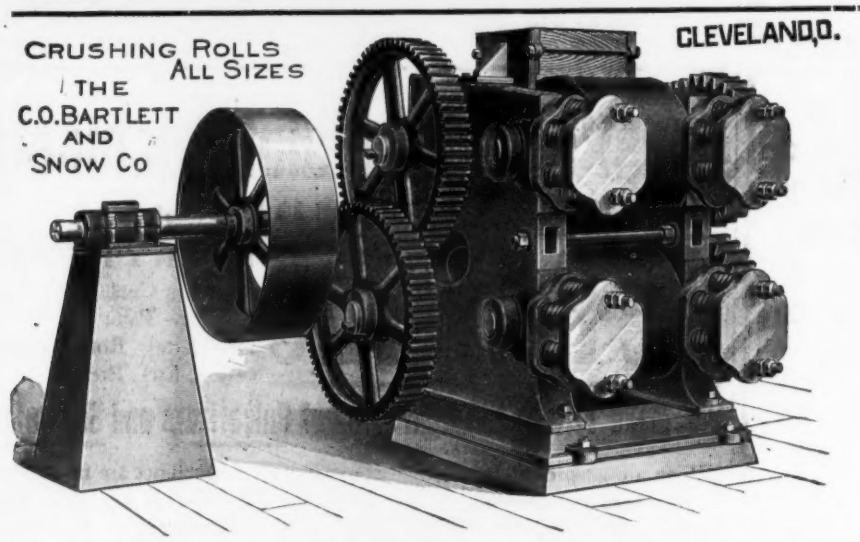
Managers of Cotton Seed Oil Mills

Protect Your Linters,
Increase Amount of Lint,
Reduce Expenses.

BY USING

Dixie Electro ....Magnet....

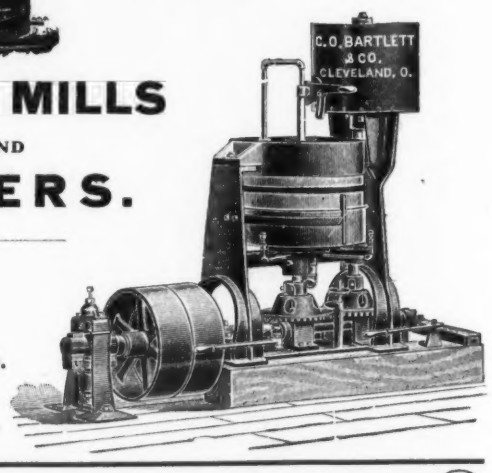
DIXIE ELECTRO MAGNET CO.
MEMPHIS, TENN.



Triumph Steam Drier for drying all kinds of chemicals.

PAINT MILLS AND MIXERS.

SEND FOR CATALOG.



THE C. O. BARTLETT & SNOW CO., CLEVELAND, O., U. S. A.
Cable Address, "Bartlett."

CONVEYING, ELEVATING and POWER TRANSMITTING MACHINERY.

A Complete Line of the Best

CALDWELL HELICOID CONVEYOR,

THE ONLY PERFECT SPIRAL CONVEYOR WITH CONTINUOUS FLIGHT. NO LAPS OR RIVETS.

Seamless Steel Elevator Buckets, Elevator Boots, Rope Transmission Machinery, Sprocket Wheels, Link Belting, Shafting, Belting, Hangers, Pulleys, Gears, Carpullers, Automatic Power Grain Shovels, Wood Split Pulleys, Wire Cloth, Perforated Metal.

Complete equipments for handling materials of all kinds.

CALDWELL'S HELICOID

H. W. CALDWELL & SON COMPANY,

Western Ave., 17th Street to 18th Street
CHICAGO, ILL.

Our new Catalogue No. 26 (440 pages, cloth bound will be sent upon request.

Eastern Sales and Engineering Office, 410, 95 Liberty Street, New York.
Southeastern Sales and Engineering Office, 411 Prudential Bldg., Atlanta, Ga.
Southwestern Sales and Engineering Office, 202 Trust Bldg., Dallas, Tex.

ride solution is employed, manganese oleate is produced. In commerce the metallic oleates are sometimes mixed with resinic products for the sake of cheapness—Farben Zeitung.

(Special Correspondence to The Reporter.)

Petroleum Hunting in Mexico.

Durango, July 13, 1903.

Oil drilling operations are being continued in various regions, but with small success so far. Nothing is heard now of the erstwhile "boom" in reputed oil lands in the Valley of Mexico. The various companies which were formed a year or so ago, seem to have relaxed their efforts; indeed, some of them never advanced beyond the share certificate stage. There is no authentic instance of native petroleum being used for fuel in Mexico, notwithstanding the many reported assertions by representatives of interested persons in regard to the daily production of alleged existing wells. The California corporation, the Mexican Petroleum Company, operating at Ebano, near Tampico, have placed an order with a New York firm for additional equipment. The oil company are said to be using crude petroleum for fuel in their engines. They have claimed a daily production of 600 barrels. They probably do not use the entire output, but so far as can be learned they are not marketing any.

Oil explorers in the State of Vera Cruz, who are believed to represent American interests, have recently placed an order for boilers with Indianapolis, Ind., makers.

The Waters-Pierce Oil Company intends to build at Tamico a refinery for paraffin, a concession having been granted by Government for that purpose. The company have an extensive plant at Tampico, where they receive their oil supply from the United States, and have recently purchased additional lands for its enlargement.

Methods of Standardizing Permanganate of Potash.*

BY W. M. GARDNER, F. C. S., B. NORTH, A. R. C. SC., AND A. R. NAYLOR.

Results which we obtained some time ago indicated that the gravimetric and volumetric methods of determining iron were not in perfect agreement, and we therefore decided to make a critical examination of the methods of standardizing and of using permanganate of potash in volumetric determinations of iron in various substances.

With regard to the standardization of the permanganate, Thiele and Dechert state that oxalic acid is preferable to the various kinds of so-called pure iron recommended for the purpose.

Rust states that manganese oxalate dried over strong sulphuric acid always contains two molecules of water, and, being non-hygroscopic, serves as a convenient salt for standardizing permanganate.

Dupre, jr., and E. Mulle have experimented with various double oxalates, and state that the most accurate results are obtained with lead oxalate, as suggested by Stolba, and with sodium oxalate, as suggested by Sorensen.

These methods introduce substances which, with the exception of oxalic acid and sodium oxalate, are not readily available, and it was therefore decided to recrystallize the permanganate of potash, and from the pure and dry salt make up a standard solution by exact weighing.

The pure salt was finally obtained in the following manner:—A hot saturated solution was rapidly filtered through recently ignited asbestos, the salt allowed to crystallize, and the mother liquor drained off; the crystals were again dissolved in a small quantity of boiling distilled water and then recrystallized, the mother liquor being again rejected. In this way very fine needle-shaped crystals were obtained, which were dried in a steam oven in the crystallizing dish used in the preparation. A decinormal solution was then prepared. In all the experiments, boiled distilled water was used, and the measurements made with vessels accurately calibrated at 15 deg. C. Decinormal solutions of ammonium oxalate, granular ferrous ammonium sulphate, and oxalic acid were made from the materials sold as "pure" without any attempt being made to further purify them, and the results in Table I. show that these substances may each be satisfactorily used, if necessary, for the standardization of permanganate. Experiments were also made with one of the samples of ammoulum oxalate, after powdering the salt and drying in a desiccator, first over calcium chloride and then over sulphuric acid and phosphorus pentoxide. The results show that the salt gradually loses water of crystallization, and it is therefore preferable to use the dry crystals without further treatment.

These solutions were further tested at intervals during a period of one month to ascertain whether they retained their strength. We find that the pure permanganate of potash retains its strength both in the solid state and in solution, whereas after one week the strength of the ammonium oxalate begins to slowly deteriorate, and the ferrous ammonium sulphate, even in a slightly acidified solution, shows a continual and regular deterioration amounting to about 3 per cent. in a fornight. These results were obtained by making up fresh standard solutions of each substance from time to time, and then crossing the solutions against each other, as shown in Table II.

TABLE I.

Permanganate Against Ammonium Oxalate.

N/10 oxolate used, 25 c.c.; 1:4 dil. H_2SO_4, 10 c.c.; temp., 60° C.

	N/10 Permanganate.	Percentage of Ammonium Oxalate + Aq.
Sample I.....	25.03	100.12
	25.03	100.12
Sample II.....	25.06	100.24
	25.04	100.16
Sample III.....	25.01	100.04
	25.01	100.04
Sample III. (transparent crystals only)	25.07	100.28
	25.03	100.12
	25.05	100.20
Sample IV.....	25.01	100.04
	25.02	100.08
Sample V.....	25.06	100.24
	25.06	100.24

Permanganate Against Oxalic Acid.

N/10 oxalic acid, 25 c.c.; H_2SO_4, 10 c.c.; temp., 60° C.

	N/10 Permanganate.	$H_2C_2O_4 + 2H_2O$.
Sample I.....	25.03	100.12
	25.04	100.16
Sample II.....	25.01	100.04
	25.01	100.04

Permanganate Against Ferrous Ammonium Sulphate.

N/10 ferrous ammonium sulphate, 25 c.c.; H_2SO_4, 10 c.c.

	N/10 Permanganate used.	Percentage of Ferrous Salt.
I. Bottle newly opened.	25.01	100.04
	25.06	100.24
II. Opened two months previously	24.97	99.86
	24.99	99.96

TABLE II.

Stability of N/10 Permanganate, N/10 Ammonium Oxalate, and N/10 Ferrous Ammonium Sulphate.

(a) Permanganate and Oxalate.

Date of Experiment, 1903.	N/10 Permanganate used.	N/10 Oxalate used.	Percentage of $(NH_4)_2C_2O_4$. H_2O in sample.
March 3....	No. 1	No. 1	100.16
March 10....	No. 1	No. 1	100.32
March 10....	No. 2	No. 1	100.20
March 17....	No. 3	No. 2	100.00
March 17....	No. 3	No. 1	99.32
March 17....	No. 1	No. 2	100.00
March 17....	No. 2	No. 2	100.08
March 30....	No. 4	No. 1	98.96
March 30....	No. 4	No. 3	100.04

No. 1 permanganate and No. 1 oxalate, prepared March 3; No. 2 permanganate, March 10; No. 3 permanganate and No. 2 oxalate, March 17; No. 4 permanganate and No. 3 oxalate, March 30.

(b) Permanganate and Ferrous Ammonium Sulphate, both prepared March 3.

Date of Experiment, 1903.	Percentage of $FeSO_4Am_2SO_46H_2O$ in sample.
March 3.....	99.88
	99.96
	99.40
March 6.....	99.64
March 10.....	98.44
March 17.....	96.80
March 30.....	94.32

Experiments with Powdered and Desiccated Ammonium Oxalate.

Permanganate used.	Oxalate Used, Dried.	Per cent. of $(NH_4)_2C_2O_4$. H_2O.
No. 2	Sample 3 (see Table I.) 14 days over $CaCl_2$.	100.84
		100.80
No. 2	Sample 3 (see Table I.) over P_2O_5 for two days.	102.28
		102.28

Experiments were then made with iron alum, using various methods of reducing the iron to the ferrous condition before titration with permanganate.

The method of reducing with zinc and sulphuric acid was ultimately found to be most suitable and reliable, though considerable difficulty was at first experienced in obtaining concordant results. The errors were finally found to be due to the use of ordinary granulated zinc, and varied within very considerable limits, as shown by the annexed results, according to the amount of zinc used. Further, different specimens of zinc varied considerably in composition, results obtained in blank tests being frequently very discordant. By using pure zinc, results were obtained which were in perfect agreement, and these, although high, are also in agreement with gravimetric estimations. The pure zinc should be preferably granulated. The high results are probably accounted for by the presence of basic compounds, as no attempt was made to insure the absence of basic ferric sulphate in the iron alum used.

TABLE III.

Estimations of Iron in Iron Alum: Effect of Purity of the Zinc.

Iron Alum.	40 c.c. diluted (1:4) H_2SO_4 used for Solution of Zinc in each case.	Percentage of $Fe_2(SO_4)_3$ HK_424H_2O.
Sample I.. Ordinary zinc (6 grms.).		118.00
		126.80
Sample I.. Pure zinc (2 grms.)		104.56
		104.96
		104.72
		104.44
Sample II. Pure zinc (6 grms.)		105.24
		105.36
Blank..... 6 grms. ordinary zinc.		3.08
		3.60
Blank..... 6 grms. pure zinc.		0.16

Gravimetric No. 1-= 105.08 per cent.

Finally, the volumetric process was applied to the estimation of iron in iron wire, the latter being "flower wire," generally accepted as 99.6 per cent. iron. Many of these estimations were made before the above mentioned method of obtaining standard permanganate of potash had been arrived at, and consequently the percentages of iron given in some of the results in Table IV. are low in comparison with the results which were later obtained for the same wire.

The method usually recommended for standardizing permanganate was found to give very variable results, as shown in the annexed table.

TABLE IV.

Estimations of Iron in Flower Iron Wire.

(a) Carbon Not Removed from Solution.

Weight of Iron Used.	Percentage of Fe.
Grm.	
0.1490	98.40
0.1095	99.52
0.1180	100.70
0.1060	101.41

(b) Carbon Removed by Filtration.

Weight of Iron.	Percentage of Iron.
Grm	
0.7611	98.34
0.7760	98.32
0.7189	98.30

It was ultimately found that these discrepancies were due to the small amount of graphitic carbon remaining when the iron was dissolved in dilute acid. For this method of standardizing permanganate it is therefore advisable to dissolve, say, about 0.75 grm. of the fine wire in dilute acid, using a flask the neck of which is covered with a watch glass or provided with an ordinary Bunsen valve, then cool quickly and make up to 250 c.c. with recently boiled distilled water. The solution is then rapidly filtered through a dry, folded filter and dry funnel direct into a burette, and 50 c.c. run off into a flask and at once titrated.

The amount of ferric iron thus formed is quite inappreciable, and results are obtained which agree excellently with one another, as shown in Table IV.

The results obtained with iron wire show that this method cannot be considered as a very accurate one for the standardization of permanganate even after the removal of the graphitic carbon, and this is probably to be accounted for by the presence, in small quantities, of other impurities in the iron. We are continuing the investigation of this question.

The conclusions arrived at from the foregoing experiments are:—

1. That an accurate permanganate solution may readily be obtained from the pure salt prepared as already described.

2. That, if necessary to standardize it, either pure ammonium oxalate, oxalic acid, or granular ferrous ammonium sulphate may be used with extremely accurate results.

Ammonium oxalate crystals should be used in the ordinary state, as when finely powdered and desiccated they are liable to lose water of crystallization. If pure ferrous ammonium sulphate is dissolved in very dilute acid, the solution is permanent for perhaps twenty-four hours, and this forms a very rapid and reliable method of standardizing permanganate.

3. In the estimation of iron in a commercial sample of metallic iron, it may be preferable to standardize the permanganate with iron wire, but the method is only reliable when the graphitic carbon present is removed by filtration previous to titration.

4. In the reduction of ferric salts by means of zinc, it is very important that pure zinc should be employed, the use of ordinary zinc introducing large errors.

5. It is essential to remove the graphitic carbon before titrating a solution of iron with permanganate.

(In "Select Methods of Chemical Analysis," latest edition, Crookes states: "The titration of the permanganate solution can only be properly made by means of metallic iron, and when the latter metal, in a sufficiently pure state for this purpose, is not at hand, oxalic acid should be used. The use of iron ammoniq-sulphate for obtaining the standard should be relected. Unless the precise composition of this salt is repeatedly ascertained, it is not to be relied upon, and this testing is a loss of time.")

*A paper read at a recent meeting of the Yorkshire Section of the Society of Chemical Industry.

Bargains in Machinery

LARGEST STOCK

FIRST AND SECOND-HAND

MACHINERY

Rebuilt and Guaranteed.

What are Your Wants?

FRANK TOOMEY,

No. 127-131 N. Third St., PHILADELPHIA

FOR SALE.

Three hydraulic presses.
Manufacturers Paraffine Co.,
Chester, Pa.

FOR SALE.

Triple effect, 18 coil, Yaryan evaporator, complete. AMERICAN ELECTROLYTIC COMPANY, Warsaw, N. Y.

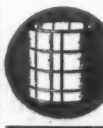
FOR SALE

Seven filter presses, 36 plates and frames for cake 36in.x36in.; plates and frames of wood. Address HARRISON BROS. & CO., Inc., Station D, Philadelphia.

MACHINERY WANTED OR FOR SALE.

If you desire to purchase second-hand machinery of any kind or dispose of surplus machinery, an advertisement in this department will bring you in touch with interested parties. Every week the Oil, Paint and Drug Reporter is in the hands of the manufacturers of chemicals, paints, varnish, linseed oil, cottonseed oil, dyestuffs, fertilizers, manufacturing chemists and drug millers; also producers of lubricating oils and all petroleum products. In addition to the above it is subscribed for by cotton mills, woolen mills and half a score of allied industries. Copy for advertisements in this department must reach us not later than Friday morning of each week. Address MACHINERY DEPARTMENT, Oil, Paint and Drug Reporter.

TANKS



ALUMINUM STEEL, all sizes. For all purposes. Acid, Oil and Grease Proof. Successful. Durable, Efficient, Rustless. Can be shipped, Knock Down, easily Erected. Gasoline Storage Tanks. Portable Houses of Aluminum Steel for Automobiles. Shipping Drums and Steel Row Boats.

CHARLES EFROS CO., Bayonne, N. J.

FOR SALE

ONE STAND PIPE

37 feet High, 73 feet Diameter,
Bottom Plate 1-2 inch,
Side Plates 3-8 inch to 5-8 inch, also
50 Tons 12 inch Bell Pipe, 9 feet long.

HENRY A. HITNER'S SONS

Aramingo Ave. and Huntingdon St.,
PHILADELPHIA, PA.

BINDERS FOR THE REPORTER, $1.00,

Address 100 William Street, New York.

PETROLEUM MARKET.

Saturday Noon, July 18, 1903.

Although the production during the month of June showed an increase of 147,000 bbls., the stocks were still further reduced, and the monthly pipe line report must consequently be regarded as decidedly bullish in tenor, and as a result of this strengthening of the statistical situation, prices on crude have been advanced 2@3c., Pennsylvania being now $1.53. But for the decrease in deliveries during June the drain on stocks would have been greater, but the prospects are that there will be a material increase in deliveries during the current month. Producers have apparently become convinced that it will be next to impossible to further increase the output and many believe it cannot be maintained at the present rate, and consequently they look for continued strengthening of the statistical situation. Many producers have faith that prices will soon go higher and are consequently not selling their production, although the advance announced a few days ago came as a surprise to many. Reports from the producing fields during the past week have shown no improvement. About an average number of new wells have been reported, but they were nearly all small affairs, the number of failures outnumbering the good wells, and altogether the only encouraging feature of the week to the driller has been the advance in prices. From Texas the reports are less satisfactory, the facilities for storage being inadequate, with a decrease in demand, and a consequent drop in the price of the product. At the lower prices consumption will again be stimulated and the situation be relieved. Considerable sales of both Sour Lake and Beaumont oil are reported at 35c. A synopsis of the last reports of the principal pipe lines is appended:—

NATIONAL TRANSIT COMPANY.

	May.	June.
Outstanding certificates...	237,000	173,000
Credit balances	1,043,734	1,278,014
Net stocks	1,280,734	1,451,014

TIDEWATER PIPE LINE COMPANY.

Outstanding certificates...	.....	.....
Credit balances	212,178	226,468
Net stocks	212,178	226,468

BUCKEYE PIPE LINE COMPANY.

Outstanding certificates...	5,000,000	4,500,000
Credit balances	11,032,321	11,420,295
Net stocks	16,032,321	15,920,295

Refined and Products.

The export movement of refined has continued active and the past week has also developed a demand for refined in barrels for export, and a number of engagements are reported. Although the foreign requirements apparently are larger, there is no important changes in the situation abroad. It is believed, however, that stocks in some of the principal foreign markets have been allowed to get low. The engagements during the week reached a total of upward of 250,000 bbls., but far the larger part for shipment in bulk. The price of barreled oil has remained steady at 8.55c. for New York loading and 8.50c. for Philadelphia loading. The principal foreign markets are firm. Quotations to-day by cable were:—Antwerp, 21f.; Bremen, 6.35 m.; London, 5⅞@6d., and Liverpool, 6½d. Freight rates are steady at 2s.@2s. 3d. hence to London, and 2s. 3d.@3s. 3d. to Continental ports, as to port and vessel. Home trade lots have been in good request, and are firm on the basis of 11c. for 150 deg. water white from tanks and 13½c. in barrels.

Cases for export have been in active request, and sales of over 450,000 are reported. The price of plain tops has been firm at 10.50c. Nominal rates for large vessels are:—For Amoy, 20@21c.; Calcutta, 10@11c.; Colombo, 20@21c.; Java, 16@17c.; Penang, 17@18c.; Hong Kong, 12½@13c.; Rangoon, 20@21c.; Saigon, 16@17c.; Shanghai, 20@21c.; Singapore, 18@19c., and Yokohama, 16@17c.

Crude for export has been in fair request, and sales of about 40,000 barrels are reported. Pennsylvania crude is quoted at 8.55c. in barrels. Cases for export have not been in request and no sales are reported.

Crude naphtha has been steady at 12.40c. For export no sales have been reported.

Closing Quotations.

CRUDE.

National Tran. certificates, ℔ bbl.	$1.53@1.53
Pennsylvania crude, bbls., ℔ gal.	8.55
Pennsylvania crude, in bulk.....	5.65
Residuum, bbls., for export.....	6@ 0¾

CRUDE AT THE WELLS.

The following are the prices paid by the pipe lines for crude as delivered from the wells:—

	1903.	1902.
Tiona .....℔ bbl.	$1.68	$1.37
Pennsylvania	1.53	1.22
New Castle.....	1.40	97
Corning	1.33	1.05
Whitehouse	1.23	92
Neodesha	1.16	..
North Lima.....	1.16	89
South Lima.....	1.11	84
Indiana	1.11	84
Somerset	97	74
Ragland	67	..
Canadian Oil:—		
Petrolia	2.00	1.76
Oil Springs, less pipeage.....	2.07	1.85

REFINED—FOR EXPORT.

Cargo lots for export, bbls....℔ gal.	— @	8.55
In bulk	— @	5.65
Philadelphia loading, bbls.....	— @	8.50
150° W. W., bbls.....	— @	10.75
In bulk.....	— @	7.15

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

120 fire test, S. W.....℔ gal.	12¼@	12½
130 fire test, S. W.....	12½@	12¾
150 fire test, W. W.....	13½@	14
In bulk from tanks.....	— @	11
300 fire test.....	12½@	12¾

REFINED IN CASES—110 FIRE TEST.

Two-five low screw, cargo, lots.....	10.50
5,000 to 10,000.....	10.65
1,000 to 5,000.....	10.70
700 to 1,000.....	10.80
400 to 700.....	10.90
300 to 400.....	11.00
200 to 300.....	11.10
100 to 200.....	12.00
Under 100.....	12.50

NAPHTHA AND GASOLINE.

Naphtha, crude, car lots, 68@72 deg.	—@	12.40
crude, cargo lots, 68@72 deg.	—@	12.40
crude, 70 deg.....	—@	12.90
sweet, 62 to 63 deg.....	—@	15
76 deg.....	—@	17
"stove"	—@	15
Gasoline, 86 deg.....	—@	17
88 deg.....	—@	19
90 deg.....	—@	22

Petroleum Statistics.

RUNS—PENNSYLVANIA OIL.

		Day.	Total Reported.
Friday,	July 10.....	89,104	676,987
Sat.-Sun.,	" 11 & 12.....	143,453	820,440
Monday,	" 13.....	75,752	896,192
Tuesday,	" 14.....	65,791	901,983
Wednesday,	" 15.....	86,563	1,048,546
Thursday,	" 16.....	.....	.....

	1900.	1901.	1902.	1903.
Jan.....	2,836,815	2,934,948	2,559,185	2,621,892
Feb.....	2,511,036	2,509,852	2,199,982	2,286,710
March..	2,915,673	2,869,586	2,560,762	2,701,879
April....	2,889,993	2,791,932	2,635,929	2,626,408
May.....	3,074,578	2,921,334	2,713,013	2,598,944
June....	3,000,272	2,712,780	2,529,449	2,678,675
July.....	3,032,983	2,915,841	2,777,650	.....
Aug.....	3,125,114	2,862,228	2,664,141	.....
Sept.....	2,920,457	2,585,682	2,727,494	.....
Oct.....	3,196,985	2,755,311	2,791,553	.....
Nov.....	2,947,155	2,519,915	2,532,007	.....
Dec.....	3,014,468	2,566,706	2,669,283	.....
Year..	35,486,529	32,496,116	31,360,448	.....
Average	2,957,211	2,745,509	2,613,371	2,585,751

DELIVERIES—PENNSYLVANIA OIL.

		Day.	Total Reported.
Friday,	July 10.....	72,790	735,766
Sat.-Sun.,	" 11 & 12.....	120,633	856,399
Monday,	" 13.....	67,710	924,109
Tuesday,	" 14.....	75,400	999,509
Wednesday,	" 15.....	94,623	1,094,132
Thursday,	" 16.....	.....	.....

	1900.	1901.	1902.	1903.
Jan.....	2,887,970	3,135,704	3,013,150	2,885,789
Feb.....	2,747,666	2,585,297	2,282,872	2,198,668
March..	2,797,661	2,885,557	2,613,412	2,792,821
April....	2,844,496	2,854,188	2,447,301	2,556,172
May.....	2,793,247	3,033,527	3,410,053	2,735,796
June....	2,880,483	2,843,781	2,708,493	2,670,232
July.....	2,756,173	3,287,511	2,740,665	.....
Aug.....	3,383,582	3,250,421	2,911,251	.....
Sept.....	3,031,430	3,075,809	2,792,104	.....
Oct.....	3,002,215	3,244,610	3,218,685	.....
Nov.....	3,144,739	3,116,322	2,898,693	.....
Dec.....	3,088,358	3,026,982	3,117,782	.....
Year..	35,358,024	36,339,709	34,154,461	.....
Average	2,940,502	3,028,309	2,846,205	2,639,923

CHARTERS—CRUDE EQUIVALENT.

		Day.	Total.	Av'ge.
Sat.-Sun.,	July 11 & 12.	193,492	1,067,421	88,952
Monday,	" 13.....	117,302	1,184,723	91,133
Tuesday,	" 14.....	109,365	1,294,088	92,435
Wed'sday,	" 15.....	77,778	1,371,866	91,458
Thursday,	" 16.....	70,476	1,442,342	90,146
Friday,	" 17.....	31,746	1,474,088	86,711

	1900.	1901.	1902.	1903.
Jan.....	1,859,225	2,397,332	2,878,610	1,162,883
Feb.....	1,343,926	1,790,875	1,715,375	1,396,350
March..	2,175,073	2,023,459	2,696,879	1,526,424
April...	1,810,763	2,800,910	1,818,864	1,887,649
May.....	1,062,851	2,420,809	1,796,904	1,521,348
June....	2,292,075	2,312,447	2,303,174	1,824,211
July.....	2,061,761	2,782,838	2,000,021	.....
Aug.....	1,165,198	2,591,191	2,221,160	.....
Sept.....	2,164,186	2,459,552	1,946,905	.....
Oct.....	2,323,275	2,255,038	2,013,388	.....
Nov.....	1,705,256	2,724,245	2,027,816	.....
Dec.....	2,027,385	2,229,595	1,773,032	.....
Year.	24,200,004	27,838,291	25,282,128	.....
Av'ge..	2,016,667	2,319,858	2,106,884	1,553,144

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ending July 17, and from Jan. 1, were as follows:—

	Week.	Year.	1902.
Refined, bbls. & blk.	258,300	5,059,006	5,716,700
Refined, cases.....	437,000	7,218,000	7,759,000
Crude, bbls. & blk..	43,200	1,028,200	1,397,900
Crude, cases.....	.....	172,000	86,000
Naphtha, bbls.....	.....	51,000	111,400
Residuum, bbls.....	.....	.....	204,700
Lubricating, bbls...	.....	57,600	93,700
Total, bbls. cde. eq..	600,159	11,392,963	13,947,997

CLEARANCES FOR THE WEEK.

During the week ending July 17, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1902.
Refined	7,036,830	183,414,641	271,497,564
Crude	3,765	6,575	101,777
Naphtha	312,000	4,307,313	7,162,181
Residuum	.....	76,883	2,820,201

EXPORT STATISTICS.

The following table shows the total exports from the port of New York and from the United States, reduced to crude equivalent, in gallons for the week ending July 17; also total shipments to date, with comparisons with 1902:—

From N. Y. for week ending July 17.	9,376,205
Total from N. Y. from Jan. 1, 1903..	244,550,425
Same period last year.....	362,903,188
Decrease	118,352,763
From U. S. for week ending July 17.	23,205,615
Total from U. S. since Jan. 1, 1903..	525,907,904
Same period last year.....	651,671,893
Decrease	125,763,989

TOTAL EXPORTS BY PORTS.

	1903.	1902.
New York.....	244,550,425	362,903,188
Philadelphia	257,405,187	259,189,791
Baltimore	18,461,856	28,884,585
Boston	334,712	305,785
San Francisco.....	5,155,724	388,546
Grand totals.....	525,907,904	651,671,893

Foreign Quotations.

REFINED.

	Antwerp.	Bremen.	London.	Liverp'l.
Monday.....	21 @—	6.35	5⅞@ 6	—@ 6½
Tuesday....	21 @—	6.35	5⅞@ 6	—@ 6½
Wednesday..	21 @—	6.35	5⅞@ 6	—@ 6½
Thursday...	21 @—	6.35	5⅞@ 6	—@ 6½
Friday.....	21 @—	6.35	5⅞@ 6	—@ 6½
Saturday....	21 @—	6.35	5⅞@ 6	—@ 6½

PETROLEUM CHARTERS.

Following is a list of vessels chartered and loading or to load petroleum at New York, Philadelphia, Baltimore and Boston. Quantities are refined in barrels, unless stated otherwise:—

New York.

Week ended Nov. 14.

Fr ship Oliver du Clisson, Japan, 16@17c. .....cs 75,000

Week ended May 29.

It bk Erasmo, Macassar, 16c.....cs 90,000

Week ended June 5.

It shp Caracciolo, Java, 16@17c.....cs 45,000

Week ended June 12.

Br bk Socotra, Shanghai, 30c.....cs 70,000
Br shp Dalcairnie, Shanghai, 30c....cs 75,000
It shp Principessa, Mafolda, Java, 16@18c. .....cs 100,000

Week ended June 26.

Am shp S P Hitchcock, Japan, 16c..cs 80,000
Br bk Kate F Troop, Zanzibar, 18c..cs 45,000
Am shp A G Ropes, Japan, 16c.....cs 80,000

Week ended July 3.

Fr bk Tourville, Hakodate, 17½c....cs 75,000
Dch shp Adriana, Java, 15½c.....cs 70,000

Week ended July 10.

Ger shp August, London, 2s. 6d....nap 9,500

Week ended July 17.

Fr bk Marschal de Contaut, Japan, 17½c. .....cs 70,000
Ger bk Standard, Havre, 2s. 3d..... 9,000
Ger bk Khorasan, Baltic, p. t..... 7,000
Am sch Republic, Teneriffe, p. t.....cs 27,000
Br bk Crown of Germany, Shanghai, 20c. .....cs 95,000

Philadelphia.

Week ended March 6.

Nor bk Grundloven, Baltic, p t..... 4,500

Week ended April 24.

It bk Brodick Castle, Marseilles, 3c. .....cde 3,000
It shp Fortunata Figaro, Adelaide and Melbourne, 14c.....cs 85,000

Week ended July 3.

It shp Stefano azeto, Padang, 15½c..cs 80,000
Ger bk Steinbek, Japan, 18@19c.....cs 70,000
It bk Angela-e-Maria, Med., 2s. 6d.... 4,000
Br str Hermiston, Nagasaki, 20c....cs 160,000

Week ended July 10.

Ger shp Mabel Rickmers, Japan, 18c..cs 75,000
Ger shp Rickmer Rickmers, Japan, 18c. .....cs 75,000
Ger shp Renee Rickmers, Japan, 18c..cs 80,000
Br bk Englehorn, Japan, 18c.....cs 75,000
Fr bk Du Gueselin, Japan, 18c.....cs 50,000
It shp Margherita, Japan, 18@19c....cs 75,000

Week ended July 17.

Nor bk Tercia, Havre, 2s. 6d..... 7,000
It bk Beech Holm, Baltic, 2s. 9d..... 4,500
Am shp Kenilworth, Japan, 18c.....cs 95,000

PETROLEUM CLEARANCES.

Following are the clearances of petroleum from the ports of New York, Philadelphia, Baltimore, Boston and San Francisco on the dates named. Refined, unless otherwise specified:—

New York.

July 6.

Br str Maraval, Trinidad, 2,300 cs

July 7.

Am str Allianca, Colon, 1,014 cs

June 8.

Br str Hyacinthus, Rosario, 22,500 cs ref, 300 cs ben
Br str Hyacinthus, Buenos Ayres, 31,424 cs
Br str Hyacinthus, Montevideo, 13,200 cs, ref, 4 cs ben
Ital str Piemonte, Surinam, 1,850 cs
Ital str Piemonte, Trinidad, 1,500 cs
Ital str Piemonte, Barbadoes, 1,250 cs
Am str Esperanza, Vera Cruz, 200 cs

July 9.

Br str Fontabelle, Barbadoes, 750 cs
Br str Fontabelle, Antigua, 3 bbls
Br str Fontabelle, St Kitts, 250 cs
Br str Fontabelle, Demerara, 200 cs
Am str Niceto, Cuba, 74 bbls cde
Am str Niceto, Santiago, 2,200 cs
Am str Niceto, Cienfuegos, 1,000 cs

July 10.

Ger str Excelsior, Hamburg, 1,670,800 gls blk
Ger str Adirondack, Kingston, 1,028 cs
Ger str Adirondack, Savanilla, 40 cs
Ger str Adirondack, Barranquilla, 500 cs
Ger str Adirondack, Cartegena, 1,000 cs
Ger str Erica, Kingston, 1,125 cs

July 11.

Bg Venturer, Bluefields, 1,250 cs, 10 bbls ref, 5 drs nap
Bg Venturer, Bocas del Toro, 1,500 cs ref, 40 drs nap
Br str Benedict, Para, 400 cs
Br str Benedict, Manaos, 2,235 cs
Cub str Curityba, Cuba, 1 bbl, 20 cs
Span str Saturnina, Cuba, 100 cs nap
Br str Newton, Buenos Ayres, 12,500 cs
Am str Philadelphia, Porto Cabello, 550 cs
Am str Philadelphia, La Guayra, 1,078 cs

July 13.

Br str Manica, East London, 1,000 cs
Br str Seneca, Kurrachee, 75,000 cs
Br str Seneca, Yokohoma, 88,977 cs
Br str Seneca, Hiogo, 500 cs
Am bktn Francis S. Hampshire, Santos, 7,500 cs

July 14.

Dtch str Chester, Antwerp, 1,150,000 gls blk
Dtch str Rotterdam, R'dam, 1,775,000 gls blk

July 16.

Nor str Talisman, Guadeloupe, 750 cs
Nor str Talisman, Fort de France, 550 cs
Nor str Talisman, Trinite, 250 cs
Nor str Talisman, Laurentian, 200 cs

Philadelphia.

July 23.

Br str Planet Mars, Avonmouth, 537 bbls

June 30.

Ger str Assyria, Hamburg, 250 bbls resid

July 3.

Br str Montauk Point, London, 500 bbls

July 6.

Ger str Pennoil, Dover f o, 2,082,853 gls blk

July 7.

Br str Potomac, Liverpool, 1,500,000 gls blk
Dtch str La Hesbaye, Antwerp, 655,373 gls ref blk, 481,922 gls gas blk

July 9.

Br str Oriflamme, Havre, 1,680,995 gls cde blk

July 10.

Ger str Helios, Bergen, 1,459,350 gls blk
Ger str Elise Marie, Flushing f o, 1,400,000 gls blk

Boston.

July 11.

Br sch Annie, Salmon River, N S, 250 gls
Str Prince George, Yarmouth, N S, 1,250 gls

San Francisco.

July 2.

Bk Andrew Welch, Honolulu, 7 bbls

July 3.

Str Argyll, Kahului, 30,000 bbls cde
Bktn S G Wilder, Honolulu, 2 drs gas

July 4.

Str Alameda, Honolulu, 15 cs ref, 5 gls cde

July 6.

Bktn Fullerton, Kihei, 650,000 gls cde

July 9.

Str Curacao, Mexico, 58 cs

July 10.

Ger str Neptun, Marshall Is, 8 drs nap
Str Mariposa, Tahiti, 36 cs

EXPORTS OF PETROLEUM.

Following are the exports of petroleum products from the port of New York (in gallons) during the past week and since Jan. 1, as also the exports during the corresponding period of last year:—

Refined.

	For week.	Since Jan. 1,	Same time last year.
Aalborg	.....	.....	430,695
Aarhuus	.....	125,000	505,789
Accra, W. C. A.	.....	.....	10,000
Adelaide	.....	1,834,410	1,302,500
Aden	.....	25,000	5,000
Algoa Bay.....	.....	908,510	897,500
Amsterdam	.....	8,284,439	3,350,095
Anjier	.....	1,441,390	1,890,000
Antigua	135	19,861	20,560
Antofagasta	.....	23,000	33,020
Antonia	.....	75,410	.....
Antwerp 1	,150,000	10,743,560	14,930,000
Africa	.....	3,000	3,000
Auckland	.....	645,050	1,546,700
Avonmouth	.....	5,675,000	7,615,000
Axim, W. C. A.	.....	170,000	.....
Azores	.....	76,684	161,795
Bahamas	.....	1,354	2,451
Bahia	.....	877,470	1,185,320
Barbadoes	20,000	196,853	264,858
Barranquilla ...	5,000	9,900	60,000
Barrow	.....	.....	5,973,000
Beira	.....	.....	4,500
Belfast	.....	.....	1,205,000
Belize	.....	.....	9,500
Bermuda	.....	179,615	211,313
Bluefields	13,007	65,352	.....
Bombay	.....	.....	3,758,120
Bonny	.....	29,500	32,000
Bordeaux	.....	.....	1,000
Bocas del Toro..	15,000	25,000	23,750
Bremen	.....	25,160	10,203
Brisbane	.....	572,570	915,410
Buenos Ayres...	120,000	8,976,630	3,925,891
Bremerhaven ...	.....	1,290,000	.....
Cabdello	.....	183,500	.....
Calcutta	.....	1,142,010	2,040,480
Caldera	.....	2,750	2,750
Callao	.....	78,150	87,000
Campeche	.....	1,080	750
Cape Coast, WCA	.....	.....	40,000
Cape Town.....	.....	700,980	1,433,180
Cape Verde Isl..	.....	6,000	.....
Cartagena	10,000	86,039	120,130
Carupano	.....	4,100	14,670
Casa Blanca....	.....	47,000	35,200
Catania	.....	49,291	50,000
Ceara	.....	148,450	142,500
Ceiba	.....	2,500	.....
Charlottetown, P. E. I.....	.....	.....	28,750
Ciudad Bolivar..	.....	.....	65,150
Colombo	.....	1,485,750	1,483,450
Colon	10,140	461,110	429,150
Conakry	.....	.....	145,000
Copenhagen	.....	.....	1,325,000
Coquimbo	.....	19,800	.....
Corn Island.....	.....	2,000	.....
Coro	.....	2,650	13,220
Corral	.....	70,000	70,000
Cuba	32,250	434,270	688,799
Cumana	.....	1,500	3,000
Curacao	.....	84,602	101,744
Delagoa Bay.....	.....	495,600	93,220
Demerara	2,000	330,600	291,392
Desterro	.....	341,070	230,000
Domenica	.....	22,173	46,453
Dover, f. o.....	.....	2,626,359	1,296,982
Dublin	.....	1,600,000	4,750,000
Dunedin	.....	254,150	122,510
Durban	.....	50,000	500

Dutch Guiana...	18,500	163,820	149,500
East London.....	9,600	977,220	831,530
Etem	.....	6,000	7,000
Flushing, f. o...	.....	38,318,000	52,850,000
Foochow	.....	.....	60,000
Forcados	.....	45,050	144,600
Frederica	.....	276,500	431,030
Fremantle	.....	1,418,620	581,560
French Guiana..	.....	132,080	50,384
Gefle	.....	.....	398,800
Gibraltar	.....	60,020	327,784
Grenada	.....	52,490	71,580
Greytown	.....	89,600	100,676
Guadeloupe	7,500	158,550	122,123
Guanoco	.....	1,500	.....
Guanta	.....	3,000	13,850
Guayaquil	.....	159,000	141,000
Hakodate	.....	.....	2,733,130
Halifax	.....	62,614	312,270
Hamburg 1,670,800		3,211,550	4,600,000
Havre	.....	.....	3,700
Hayti	.....	341,455	369,750
Hiogo	5,000	5,000	1,444,100
Hodeidah	.....	.....	180,000
Hong Kong.....	.....	4,227,320	8,853,570
Honolulu	.....	.....	50,000
Hudiksvall	.....	150,950	.....
Hull	.....	1,268,587	1,212,800
Iquique	.....	4,000	4,200
Iquitos	.....	2,950	.....
Jamaica	20,798	570,545	570,424
Kjoge	.....	.....	138,282
Koenigsberg	.....	.....	174,165
Kurrachee	750,000	950,000	.....
Lagos	.....	.....	100,000
La Guayra.....	10,780	242,711	297,894
La Roumania....	.....	30,000	65,000
Las Palmas.....	.....	449,770	599,250
Laurentian	2,000	2,000	.....
Lisbon	.....	396,101	812,431
Liverpool	.....	250	4,300,000
London	.....	19,175,000	20,998,479
Lyttleton	.....	453,800	162,400
Maccio	.....	303,500	342,000
Madeiro	.....	20,000	2,000
Madras	.....	1,330,900	.....
Malta	.....	.....	20,000
Manaos	22,850	393,140	239,825
Manchester	.....	104,102	1,535,400
Manila	.....	1,172,820	1,274,000
Maracaibo	.....	100,788	104,100
Maranham	.....	226,440	234,783
Martinique	5,500	90,950	130,112
Mauritius	.....	167,000	40,000
Melbourne	.....	805,140	986,150
Mollendo	.....	73,500	27,500
Moluccas	.....	.....	117,500
Montevideo	126,800	1,776,040	2,050,535
Montserrat	.....	.....	150
Mossel Bay.....	.....	24,500	41,600
Naples	.....	.....	2,400
Nassau	.....	69,832	62,459
Nassau, N. P...	.....	3,510	14,091
Newcastle	.....	207,000	33,800
Old Calabar.....	.....	30,000	45,070
Oporto	.....	.....	631,864
Oran	.....	.....	20,000
Padang	.....	.....	1,517,460
Parahyba	.....	120,000	114,000
Para	4,000	1,038,382	900,750
Pascasmayo	.....	6,000	20,000
Payta	.....	9,500	3,000
Penang	.....	526,000	.....
Pernambuco	.....	1,332,220	1,575,980
Pimental	.....	2,000	6,000
Pisaqua	.....	.....	2,000
Pisco	.....	15,000	8,000
Port Chalmers...	.....	52	258,000
Port Elizabeth..	.....	.....	53,200
Port Limon.....	.....	66,645	74,035
Port Natal.....	.....	965,800	1,003,000
Porto Cabello...	5,500	109,290	141,260
Porto Rico.....	.....	.....	2,000
Progreso	.....	13,780	4,600
Puerto Cortez...	.....	15,250	10,710
Punta Arenas...	.....	25,000	48,500
Re Union.....	.....	.....	675,250
Rio Gr. do Sul..	.....	399,930	1,121,160
Rio Janeiro.....	.....	2,069,000	2,791,680
Rosario	216,000	1,446,800	754,800
Rotterdam 1,775,000		21,775,000	21,687,700
Saigon	.....	616,720	.....
Salaverry	.....	15,000	28,000
Salt Pond, WCA.	.....	.....	10,000
San Andreas.....	.....	4,124	42,729
San Domingo....	.....	271,329	250,854
San Fernando...	.....	5,380	49,400
Santos	75,000	1,301,000	1,953,150
Savanilla	400	117,604	169,966
Shanghai	.....	5,889,900	25,689,040
Sierra Leone....	.....	5,200	200
St. Andrew.....	.....	.....	1,500
St. Croix.....	.....	24,906	19,276
St. John, N. B...	.....	.....	643,579
St. Johns, N. F..	.....	269,346	256,491
St. Kitts.....	2,500	75,800	74,450
St. Lucia.....	.....	46,830	31,300
St. Martins.....	.....	3,850	4,100
St. Thomas.....	.....	22,010	16,130
St. Vincent.....	.....	36,050	76,758
Sourabaya	.....	902,240	2,040,050
Southampton ...	.....	150,000	1,178,126
South Shields...	.....	180,000	1,270,000
Stockholm	.....	.....	509,490
Sunderland	.....	987,473	2,820,000
Sundsvall	.....	240,000	410,500
Sydney	.....	1,574,690	983,200
Talcahuano	.....	379,700	677,750
Tampico	.....	.....	1,000
Tilt Cove.....	.....	1,500	1,039
Trinidad	36,480	503,539	307,040
Trinite	2,500	2,500	.....
Truxillo	.....	11,650	7,600
Tsintau	.....	.....	650,000
Tuborg	.....	110,650	185,997
Turks Island....	.....	9,323	8,223
Valparaiso	.....	2,715,000	2,287,500
Vera Cruz.....	2,000	6,000	4,200
Victoria	.....	70,000	163,700
Vienna	.....	10,000	.....
Wellington	.....	943,980	415,600
Yokkaichi	.....	816,400	.....
Yokohama	889,770	3,854,490	13,907,170
Zanzibar	.....	.....	823,210
Totals 7,036,830		183,414,641	272,146,563

Crude.

Bermuda	.....	51	.....
Cape Town.....	.....	500	.....
Ciudad Bolivar..	.....	.....	700
Colon	.....	200	.....
Cuba	3,765	4,765	.....
Domenica	.....	52	.....
Havana	.....	.....	100,000
Hayti	.....	48	.....
Jamaica	.....	.....	158
London	.....	.....	350
Port Limon.....	.....	950	.....
Porto Rico.....	.....	.....	500
Totals	3,765	6,575	102,284

Naphtha.

699'49	.....	.....	snnuiav
Adelaide	.....	8,584	3,430
Algoa Bay.....	.....	20,122	4,050
Antofagasta	.....	200	200
Auckland	.....	110,000	44,791
Azores	.....	20	.....
Bahia	.....	1,017	94
Barbadoes	.....	.....	50
Barranquilla ...	.....	920	344
Beira	.....	100	.....
Bermuda	.....	5,930	10,188
Bluefields	500	800	.....
Bocas del Toro..	4,000	4,000	550
Bombay	.....	.....	1,000
Brisbane	.....	11,080	10,750
Buenos Ayres...	303,670	358,110	28,251
Callao	.....	100	30
Cape Town.....	.....	17,004	15,581
Cartagena	.....	684	150
Christchurch ...	.....	.....	960
Coquimbo	.....	400	1,250
Corral	.....	2,930	.....
Cuba	1,000	4,830	1,384
Curaçao	.....	58	94
Delagoa Bay....	.....	8,141	600
Demerara	.....	50	2,550
Dover, f. o....	.....	240,335	.....
Dunedin	.....	28,800	10,200
Durban	.....	9,000	.....
Dutch Guiana...	.....	.....	200
East London....	.....	19,218	2,305
Fremantle	.....	9,340	1,363
Furt Blaye.....	.....	767,131	818,401
Gibraltar	.....	1,500	.....
Greytown	.....	.....	10
Guadeloupe	.....	1,163	297
Guanaco	.....	.....	100
Guayaquil	.....	6,300	.....
Halifax	.....	.....	1,000
Havre	.....	608,042	454,750
Hayti	.....	827	1,560
Hong Kong.....	.....	15,000	.....
Jamaica	.....	821	2,415
La Guayra.....	.....	.....	150
Liverpool	.....	.....	2,300,578
London	.....	.....	2,263,394
Lyttleton	.....	72,000	8,728
Maccio	.....	.....	95
Malta	.....	1,135	1,000
Manila	.....	14,250	6,100
Maranham	.....	210	10
Martinique	.....	100	123
Melbourne	.....	67,620	72,476
Mollendo	.....	300	.....
Montevideo	40	2,403	1,078
Para	.....	.....	10
Pascasmayo	.....	.....	200
Pernambuco	.....	700	1,020
Pimental	.....	250	.....
Port Chalmers..	.....	.....	980
Port Elizabeth..	.....	200	.....
Portishead	.....	.....	243,450
Port Limon.....	.....	647	484
Port Natal.....	.....	30,395	7,057
Porto Rico.....	.....	.....	640
Progreso	.....	2,705	.....
Puerto Cortez...	.....	2,000	190
Rio Janeiro.....	.....	980	1,095
Rosario	2,850	4,320	820
Rouen	.....	1,588,157	404,456
San Domingo....	.....	50	20
Savanilla	.....	1,764	307
Santos	.....	1,740	160
Shanghai	.....	10,040	3,000
Singapore	.....	2,000	.....
St. Johns, N. F..	.....	3,096	5,763
St. Kitts.....	.....	10	.....
St. Lucia.....	.....	10	.....
Stockholm	.....	.....	152,650
Sydney	.....	79,460	69,054
Talcahuano	.....	750	.....
Trinidad	.....	160	585
Truxillo	.....	1,000	760
Tuborg	.....	.....	106,750
Valparaiso	.....	1,809	2,650
Venice	.....	1,425	1,200
Wellington	.....	73,900	18,740
Yokohama	.....	.....	3,000
Totals	312,060	4,322,789	7,162,178

TOTAL IMPORTS AT NEW YORK.

In the following table we give the total imports (in packages unless otherwise specified), and their values at the port of New York, for the week ending July 16, 1903:—

	Quantity.	Value.
Glass, plate.....	87	89,472
Window	5,319	10,386
L. G. Plates.....	53	5,992
Ambergris	1	445
Arsenic	100	1,321
Acid, benzoic.....	79	2,169
Carbolic	28	433
Citric	1,130	2,937
Oxalic	30	1,178
Aniline colors	810	56,222
Salt	298	10,489
Ammonia, carb.....	15	358
Muriate	118	3,795
Argols	3,174	105,808
Albumen	197	9,957
Alizarine	80	5,397
Ass't	30	446
Asphalt	....	8,905
Balsam, copaiba.....	25	879
Tolu	2	56
Bark, cincho.....	1,277	34,594
Barytes, carb.....	250	521
Sulph	1,494	1,444
Bleach, powder.....	198	1,870
Brimstone	....	70,115
Bronze powder.....	....	7,645
Borax	....	27
Buchu leaves.....	6	271
Butter, cocoa.....	110	4,785
Chalk	....	1,449
Calomel	10	326
Chemical salts.....	170	9,410
Chicory	2,601	5,715
Cinchonidia	2	1,782
Coca leaves.....	831	23,910
Cobalt	5	2,263
Cudbear	1	88
Cuttlefish bone.....	95	845
Dyewood, ext.....	1,374	11,888
Ergot	50	1,534
Flowers, arnica.....	45	539
Cham	19	401
Insect	16	845
Fuller's earth.....	1,050	961
Gambier	7,884	79,468
Gelatine	153	4,926
Glycerine	653	58,853
Gum, arabic	65	1,650
Animi	5	812
Assafoetida	21	925
Chicle	7	57
Copal	2,219	23,707
Damar	305	3,898
Gamboge	66	2,329
Guiac	6	114
Kowrie	1,660	63,925
Licorice	37	694
Myrrh	1	53
Olibanum	1	30
Shellac	2,121	74,910
Tragacanth	83	4,563
Glue	596	13,536
Insect powder.....	2	55
Indigo	91	7,210
Extract	1	57
Isinglass	1	118
Laurel leaves.....	110	344
Leeches	6	57
Manna	1	43
Manganese	14	159
Ore, tons.....	51	713
Manure salt.....	....	10,477
Nut galls.....	1	32
Nux vomica.....	1,879	1,076
Orchilla liq.....	13	1,393
Oxide, zinc.....	75	1,547
Oil, aniline.....	67	4,848
Almonds	32	674
Bergamot	....	11
Camphor	463	1,729
Cajeput	75	1,664
Citronella	45	8,172
Cod	6	203
Cocoanut	1,134	77,598
Fusel	150	6,097
Geranium	3	515
Harlem	50	633
Linseed	61	1,302
Lavender	14	1,595
Laurel	3	43
Lemon	10	148
Myrbane	33	2,395
Nut	1,112	15,740
Neroli	8	1,108
Origanum	5	116
Orange	16	815
Olive	8,542	64,125
Palm	321	23,969
Rapeseed	117	2,241
Rose	3	1,410
Rosemary	6	241
Sesame	25	624
Sod	56	665
Thyme	4	292
Wood	125	2,100
Other essential.....	76	9,537
Opium	15	2,752
Orange peel.....	1	11
Paints, unspecified.....	....	17,530
Berlin blue.....	32	2,250
Blanc fixe.....	50	895
Chrome yellow.....	9	286
Colcothar	13	40
Iron oxide.....	61	575
Lithophone	214	2,972
Orange mineral.....	16	488
Ocher	126	788
Red lead.....	25	501
Sienna	60	349
Umber	150	429
Venetian red.....	269	878
Vermilion	17	2,546
White lead.....	128	1,296
Pitch	53	1,101
Potash, chlor.....	5	71
Carb	105	3,612
Caustic	47	1,116
Cyanide	50	1,820
Prussiate	114	7,502
Sulph	2,000	7,870
Potato starch.....	210	885
Plumbago	3,275	95,705
Quinine	1	80
Reg antimony.....	255	4,217
Rose leaves.....	2	156
Root, arrow.....	51	2,224
Gentian	105	434
Licorice	124	1,034
Sarsaparilla	41	326
Saccharine	2	250
Saffron, ext.....	1	396
Saltpetre	4,220	20,964
Sage leaves.....	105	568
Senna	7	174
Soda, caustic.....	25	356
Nitrate	22,146	60,115
Sulphate	50	459
Silicate	20	399
Sponges	566	9,858
Stearine	304	8,442
Sumac	80	670
Ext of.....	5	69
Talc	533	1,274
Tar	30	166
Turmeric	140	410
Ultramarine	376	5,708
Vanilla beans.....	9	3,796
Varnish	62	2,698
Venice Turp.....	55	478
Verdegris	10	457
Bristles	541	51,083
Dutch metal.....	9	1,232
Metal leaf.....	4	838
Cassia	1,234	11,266
Cinnamon	100	1,347
Chillies	1,400	2,287
Ginger	1,409	7,559
Mace	59	5,561
Mustard	285	4,677
Nutmegs	178	4,047
Pepper	2,738	41,595
Pimento	742	4,268
Corkwood	....	48,347
Fustic	....	1,102
Logwood, M. lbs.....	160	1,067
Candles	....	116
Clay	....	4,702
Carbon	....	5,211
Corks	....	17,934
Sago flour	1,585	2,889
Seed, anise	25	209
Caraway	200	949
Cardamom	21	537
Castor	1,655	4,815
Celery	50	917
Clover	108	795
Coriander	540	1,043
Cummin	57	300
Fenugreek	50	195
Lycopodium	15	1,720
Soap, castile.....	3,060	9,803
Stock	2,845	64,975
Stone, pumice.....	....	2,559
Tapioca	3,877	12,702
Flour	2,187	5,127
Wax	....	13,555

Palm Oil Trade of Lagos.

The African section of the Liverpool Chamber of Commerce have received a letter giving the following figures as representing the palm oil and palm kernel trade of Lagos for the twelve years ended 1901:—

	Gallons.	Value.
1890	3,200,824	£190,657
1891	4,204,825	252,958
1892	2,458,260	137,743
1893	4,073,055	252,051
1894	3,393,533	187,928
1895	3,826,392	205,553
1896	3,154,333	159,150
1897	1,858,968	97,590
1898	1,889,939	97,337
1899	3,292,881	168,457
1900	2,977,926	190,165
1901	3,302,055	207,468

The largest quantities of palm oil were exported in the years 1891, 1893 and 1895. The largest quantities of palm kernels were exported in the years 1901, 1894 and 1893. The average quantity exported for the first six years under review, viz., 1890-1895, is 46,137 tons; for the last six years under review, viz., 1896-1901, is 47,825 tons. Mr. Morel also drew attention to the fact that during the last six years of the ewelve under review the average output of palm oil shows decrease, whereas a considerable increase is shown in the average of palm kernels for the same period.

The FREEDOM OIL WORKS CO.

HIGH GRADE

Spindle and Neutral Oils and Wool Stock

FREEDOM, PA., U. S. A.

CREW LEVICK COMPANY,

Producers and Refiners

Of High Quality Oils Only

PETROLEUM LUBRICANTS

Of the Highest Viscosity and Fire Test.

REFINERIES:

Seaboard Oil Works
Muir Oil Works
Glade Oil Works
Warren Gasoline Works

OFFICES:

Philadelphia, New York, Boston, Chicago, Omaha, Richmond, Savannah, London, Liverpool, Glasgow, Paris, Antwerp, Frankfort, A M

Water-White Oils. Naphthas. Gasolines. Paraffine Wax.

Exports from New York.

From Jan. 1, 1903, to June 30, 1903.

N. B.—For exports of cottonseed oil, flaxseed and petroleum, see pages 19, 20 and 29, respectively.

Alcohol, Wood, Crude.

Countries.	Barrels.	Dollars.
Australia & N. Zealand.	123	3,484
Belgium	1,935	41,450
British West Indies	1	30
China	2	62
France	39	3,910
Germany	1,335	27,135
Italy	141	3,995
Totals	3,576	80,066

Candles.

Countries.	Dollars.
Africa, South	19,080
Australia and New Zealand	134,402
Brazil	1,064
British E Singapore	6
British Guiana	963
British West Indies	3,938
Central America	642
China	4,590
Cuba	2,409
Danish West Indies	292
Dutch Guiana	127
Dutch West Indies	453
French West Indies	33
Hayti and San Domingo	3,889
Japan	11,606
Mexico	309
Newfoundland	382
Peru	1,550
U. S. Colombia	12,790
Venezuela	2,483
Total	201,008

Carbon.

Countries.	Dollars.
Africa, Algiers	3,600
Australia and New Zealand	167
Belgium	3,380
British West Indies	23
Central America	38
Cuba	1,749
Danish West Indies	5
Denmark	335
England	6,192
France	27,220
Germany	32,339
Hayti and San Domingo	7
Italy	1,500
Mexico	183
Netherlands	7,506
Nova Scotia	16
Scotland	3,600
U. S. Colombia	93
Venezuela	28
Total	87,981

Copper Sulphate.

Countries.	Packages.	Dollars.
Argentine Republic	1,315	12,302
Austria	6,665	147,200
Belgium	286	6,549
Brazil	1	29
British West Indies	8	213
Central America	2	82
Cuba	32	887
England	36	900
France	70	1,445
Germany	180	3,638
Greece	144	2,250
Italy	11,748	262,297
Mexico	36	801
Portugal	80	1,820
U. S. Colombia	18	509
Venezuela	1	39
Totals	20,622	440,881

Glucose.

Countries.	Barrels.	Dollars.
Africa, South	1,510	22,465
Argentine Republic	815	10,962
Australia & N. Zealand.	4,382	60,175
Belgium	1,380	17,425
British West Indies	1	15
Central America	5	76
Chili	10	181
Cuba	150	2,174
England	69,042	843,200
Germany	60	650
Ireland	50	650
Mexico	35	514
Newfoundland	23	358
Peru	4	35
Philippine Islands	40	576
Scotland	7,399	93,515
Turkey	65	806
Uruguay	65	794
Venezuela	2	28
Totals	85,038	1,054,599

Glue.

Countries	Dollars.
Africa, South	824
Argentine Republic	259
Australia and New Zealand	3,068
Belgium	2,525
Brazil	102
British West Indies	146
Central America	351
China	80
Cuba	4,144
Danish West Indies	35
Denmark	10
Ecuador	130
England	5,886
France	3,241
Germany	8,140
Hayti and San Domingo	296
Italy	600
Japan	315
Mexico	3,085
Netherlands	292
Nova Scotia	140
Peru	12
Philippine Islands	796
Portugal	317
Scotland	20,044
Turkey	81
U. S. Colombia	619
Venezuela	179
Total	55,617

Grape Sugar.

Countries	Bags.	Dollars.
England	132,834	320,129
Scotland	5,000	13,600
Totals	137,834	333,729

Grease, Lubricating.

Countries	Dollars.
Africa, South	23,982
Argentine Republic	3,713
Australia and New Zealand	34,297
Austria	36,159
Belgium	91,464
Brazil	2,870
British East Indies	244
Singapore	37
British West Indies	1,945
British Guiana	7
Central America	515
Chili	7,174
China	312
Cuba	41,649
Danish West Indies	90
Denmark	741
Ecuador	7
England	229,326
France	100,017
French West Indies	29
Germany	39,787
Hayti and San Domingo	1,519
Italy	15,850
Japan	4,591
Mexico	1,009
Newfoundland	1,773
Netherlands	3,263
Nova Scotia	183
Peru	1,236
Philippine Islands	591
Portugal	192
Russia	4,181
Scotland	3,540
Spain	168
Sweden and Norway	224
Turkey	244
U. S. Colombia	548
Uruguay	67
Venezuela	596
Total	654,139

Grease, Soap.

Countries	Dollars.
Austria	13,850
Belgium	13,431
Brazil	81
British West Indies	827
Central America	839
Cuba	9,101
Denmark	300
Ecuador	497
England	112,134
France	64,731
Germany	49,427
Hayti and San Domingo	140
Italy	9,768
Japan	118
Mexico	626
Newfoundland	2,564
Peru	164
Spain	208
Turkey	670
U. S. Colombia	1,895
Venezuela	38
Total	281,409

Lead.

Countries.	Pounds.	Dollars.
Austria	1,433,878	36,022
Belgium	1,568,287	37,500
China	246,427	6,678
Cuba	32,027	880
England	23,778,668	686,695
Germany	17,409,003	450,267
Italy	1,635,908	40,900
Netherlands	112,435	2,650
Nova Scotia	33,601	840
Russia	5,377,951	136,125
Scotland	5,377,562	137,004
Totals	57,005,747	1,535,561

Lime, Acetate.

Countries.	Bags.	Dollars.
Belgium	89,857	214,735
England	67,618	156,889
France	5,688	11,628
Germany	39,830	104,662
Italy	4,504	10,815
Netherlands	3,058	7,600
Scotland	1,597	4,114
Totals	212,152	510,443

Linseed, Cake.

Countries.	Pounds.	Dollars.
Belgium	44,466,371	550,679
England	4,642,434	60,407
Netherlands	172,729	2,106
Totals	49,281,534	613,192

Linseed, Meal.

Countries.	Pounds.	Dollars
Belgium	5,358,740	64,630
British West Indies	37,000	502
Denmark	55,000	650
England	558,000	10,800
France	219,780	2,600
Germany	600,000	10,800
Scotland	472,250	5,989
Totals	7,360,770	95,971

Oil Cake.

Countries.	Pounds.	Dollars
Belgium	55,465,095	651,393
British Guiana	4,480	63
Denmark	56,088	700
England	15,105,582	187,546
France	18,118,017	222,939
Germany	1,085,540	11,526
Netherlands	38,751,420	530,668
Scotland	1,292,658	16,100
Totals	129,878,880	1,620,935

Oil, Cod.

Countries.	Barrels.	Dollars.
Australia & N. Zealand.	1,370	21,323
Austria	120	1,898
Belgium	70	1,200
British West Indies	4	71
England	430	3,018
France	120	2,291
Germany	175	4,545
Italy	330	5,304
Netherlands	86	1,300
Totals	2,705	40,950

Oil, Corn.

Countries.	Barrels.	Dollars.
Belgium	26,770	450,718
Denmark	985	19,600
England	4,824	86,429
Germany	2,626	48,331
Netherlands	2,002	37,606
Scotland	388	7,859
Sweden and Norway	718	13,834
Totals	38,313	664,387

Oil, Corn, Cake.

Countries.	Pounds.	Dollars.
France	1,120,016	12,950
Germany	222,194	2,520
Totals	1,342,210	15,470

Oil, Fish.

Countries.	Dollars.
Belgium	15,449
Denmark	800
England	45,799
France	1,329
Germany	7,114
Italy	175
Netherlands	10,451
Scotland	20,607
Totals	101,724

Oil, Lard.

Countries.	Gallons.	Dollars.
Africa, South	68,704	59,918
Australia & N. Zealand.	1,630	1,224
Belgium	2,750	1,769
Brazil	4,850	3,970
British Guiana	900	658
British West Indies	2,145	1,808
Chili	2,710	2,383
China	300	192
Cuba	400	291
Danish West Indies	280	218
Denmark	1,250	962
Dutch West Indies	350	287
England	35,569	29,675
France	5,904	4,819
Germany	11,850	9,809
Hayti and San Domingo.	884	739
Italy	1,073	999
Mexico	215	137
Nova Scotia	50	36
Peru	2,843	1,955
Scotland	3,057	2,682
Spain	10	6
U. S. Colombia	1,096	893
Uruguay	1,250	1,050
Venezuela	265	216
Totals	151,215	126,597

Oil, Linseed.

Countries.	Gallons.	Dollars.
Africa, Sierra Leone	150	88
South	140	90
Australia & N. Zealand.	65,152	29,943
Brazil	25	12
British West Indies	2,602	1,391
Central America	1,876	972
Chili	100	56
China	130	64
Cuba	4,603	2,011
Danish West Indies	198	98
Dutch West Indies	310	158
England	700	428
French Guiana	20	12
French West Indies	350	156
Germany	100	60
Hayti and San Domingo.	4,432	2,080
Japan	2,000	970
Mexico	7,328	3,728
Netherlands	250	82
Peru	640	347
Philippine Islands	300	207
Portugal	100	50
Sweden and Norway	100	50
U. S. Colombia	4,545	2,631
Venezuela	2,569	1,216
Totals	98,720	46,900

Oil, Lubricating.

Countries.	Gallons.	Dollars.
Africa, Algiers	11,032	1,876
Egypt	258,909	41,593
South	690,039	143,089
Argentine Republic	507,382	91,041
Australia & N. Zealand.	1,220,195	199,108
Austria	257,122	35,189
Azores and Madeira	50	13
Belgium	1,825,396	227,451
Brazil	410,387	86,375
British E. Indies, India.	510,409	81,980
Singapore	246,506	38,103
British Guiana	6,695	1,626
British West Indies	45,198	12,403
Central America	13,250	3,217
Chili	450,066	99,064
China	223,573	37,571
Cuba	182,599	43,778
Danish West Indies	10,993	3,789
Denmark	151,840	22,357
Dutch Guiana	200	50
Dutch West Indies	9,467	3,832
Ecuador	3,150	778
England	8,730,951	1,186,635
France	5,137,071	721,163
French Guiana	50	21
French West Indies	200	79
Germany	3,160,204	505,937
Greece	3,500	320
Hayti and San Domingo.	18,660	4,914
Italy	1,629,848	240,427
Japan	800,363	138,274
Malta	1,950	235
Mauritius	12,700	1,670
Mexico	271,502	40,972
Netherlands	1,746,502	223,427
Newfoundland	23,976	4,436
Nova Scotia	21,678	5,109
Peru	32,710	5,832
Philippine Islands	9,500	1,789
Portugal	222,906	34,035
Russia	155,454	35,760
Scotland	1,621,465	216,902
Spain	148,650	18,372
Sweden and Norway	142,098	20,556
Turkey	22,750	2,748
U. S. Colombia	38,533	8,972
Uruguay	50,340	10,258
Venezuela	11,897	2,899
Totals	31,049,916	4,606,030

Oil, Meal.

Countries.	Pounds.	Dollars
Africa, South	45,228	680
Australia & N. Zealand.	32,970	420
British Guiana	225,833	3,274
British West Indies	5,183,611	74,919
Danish West Indies	250,250	3,277
Dutch Guiana	1,250	17
Dutch West Indies	3,125	45
French Guiana	5,000	101
French West Indies	36,000	533
Hayti and San Domingo.	175	4
Netherlands	176,300	1,850
Venezuela	171,875	2,492
Totals	6,131,617	87,612

Oil, Neatsfoot.

Countries.	Gallons.	Dollars.
British Guiana	20	15
British West Indies	463	240
Central America	30	19
Cuba	800	484
Denmark	1,065	840
England	2,071	2,005
France	13,380	11,407
Germany	23,181	14,953
Hayti and San Domingo.	24	13
Italy	1,000	995
Netherlands	322	262
Nova Scotia	100	67
U. S. Colombia	30	18
Totals	42,486	31,318

Oleo.

Countries.	Tierces.	Dollars.
Belgium	2,029	58,265
British West Indies	41	1,462
Denmark	12,682	400,275
England	5,623	205,821
France	30	1,050
Germany	28,414	1,115,230
Italy	225	7,425
Netherlands	69,403	1,322,320
Newfoundland	1,409	55,497
Russia	70	2,150
Scotland	1,670	65,670
Sweden and Norway	12,981	429,765
Turkey	1,016	32,086
Totals	135,593	3,696,916

Oil, Peppermint.

Countries.	Dollars.
Africa, South	45
Argentine Republic	589
British West Indies	475
Cuba	128
Danish West Indies	31
England	2,215
Germany	1,284
U. S. Colombia	118
Total	4,885

Oil, Tallow.

Countries.	Gallons.	Dollars.
Cuba	250	162
England	500	320
France	6,900	2,855
Germany	2,477	1,336
Mexico	12,160	7,284
Netherlands	250	75
Totals	22,537	12,032

Oil, Wintergreen.

Countries.	Dollars.
Cuba	6
England	396
France	2,315
Nova Scotia	10
Total	2,727

Pitch.

Countries.	Barrels.	Dollars.
Africa, South	6	13
Australia & N. Zealand.	82	264
Azores and Madeira	18	34
British East Singapore	80	140
British Guiana	532	989
British West Indies	309	569
Central America	14	28
Chili	100	174
China	450	797
Cuba	163	292
Danish West Indies	19	34
Dutch Guiana	39	72
Dutch West Indies	36	64
Ecuador	8	16
French West Indies	10	25
Hayti and San Domingo.	105	206
Mexico	91	371
New Brunswick	295	487
Newfoundland	226	404
Nova Scotia	125	206
Peru	51	96
Philippine Islands	10	17
U. S. Colombia	137	260
Totals	2,906	5,558

Rosin.

Countries.	Barrels.	Dollars.
Africa, Egypt	2	8
South	158	657
Argentine Republic	6,050	30,418
Australia & N. Zealand.	7,390	42,024
Austria	30	117
Azores & Madeira	150	740
Belgium	25	150
Brazil	10,904	47,487
British East Indies	700	2,922
Singapore	7	32
British Guiana	10	36
British West Indies	426	2,019
Central America	183	914
Chili	2,055	9,830
China	157	651
Cuba	1,111	5,181
Danish West Indies	4	16
Dutch West Indies	42	157
Ecuador	3	17
England	3,637	15,230
French West Indies	18	78
Germany	100	445
Hayti and San Domingo.	1,126	5,872
Italy	3,875	17,138
Japan	3,100	13,122
Mexico	411	2,197
New Brunswick	100	726
Newfoundland	272	1,282
Nova Scotia	157	1,158
Peru	1,906	10,502
Philippine Islands	25	95
Portugal	170	1,320
Russia	5,200	12,354
Scotland	3,200	10,827
U. S. Colombia	1,343	6,443
Uruguay	812	4,055
Venezuela	2,131	10,889
Totals	56,990	256,709

Soap.

Countries.	Dollars.
Africa, Algiers	12
Egypt	160
Sierra Leone	201
South	18,191
Argentine Republic	28,806
Australia and New Zealand	56,266
Azores and Madeira	354
Belgium	1,927
Brazil	10,945
British East Indies	1,632
Singapore	2,405
British Guiana	1,945
British West Indies	31,876
Central America	5,616
Chili	10,207
China	9,247
Cuba	13,704

Soap (Continued).

Countries.	Dollars.
Danish West Indies	1,872
Denmark	21
Dutch Guiana	7,883
Dutch West Indies	1,692
Ecuador	324
England	187,320
France	7,132
French West Indies	42
Germany	1,499
Hayti and San Domingo	111,473
Italy	148
Japan	4,660
Malta	419
Mexico	4,507
Netherlands	842
Newfoundland	441
Nova Scotia	307
Peru	2,245
Philippine Islands	1,924
Portugal	516
Scotland	76,287
Spain	1,125
Sweden and Norway	191
Turkey	519
U. S. Colombia	42,109
Uruguay	433
Venezuela	4,792
Total	654,217

Soda, Bicarbonate.

Countries.	Pounds.	Dollars.
Africa, South	43,680	502
Argentine Republic	294,710	2,495
Australia & N. Zealand.	635,204	5,726
Belgium	67,200	788
British Guiana	3,360	39
British West Indies	76,889	962
Central America	902	20
Chili	6,294	85
Cuba	177,194	1,827
Danish West Indies	4,783	105
Dutch West Indies	2,191	30
England	532,048	6,126
Germany	109,573	1,228
Hayti & San Domingo	9,483	137
Italy	42,848	724
Japan	515,500	4,215
Mexico	87,605	962
Newfoundland	32,331	2,431
Philippine Islands	400	5
Nova Scotia	19,150	154
Scotland	239,460	3,007
Turkey	30,240	293
U. S. Colombia	5,648	107
Uruguay	4,840	50
Venezuela	7,649	129
Totals	2,948,882	32,147

Soda, Caustic.

Countries.	Pounds.	Dollars.
Brazil	15,105	383
British West Indies	18,970	523
Central America	37,575	1,071
Chili	33,448	708
Cuba	146,981	3,334
Danish West Indies	625	23
Dutch West Indies	10,880	331
Ecuador	3,480	80
England	39,990	620
Hayti & San Domingo	166,988	4,504
Japan	1,086,478	20,124
Mexico	215,327	4,643
Peru	105,473	2,336
U. S. Colombia	72,292	1,777
Venezuela	92,603	2,686
Totals	2,046,295	43,143

Spermaceti.

Countries.	Pounds.	Dollars.
Argentine Republic	290	56
Austria	6,729	1,563
Belgium	1,577	340
Cuba	191	98
England	3,508	738
France	2,554	600
Germany	50,154	10,322
Italy	2,557	570
Spain	1,915	411
Uruguay	292	61
Totals	69,727	14,759

Sponges.

Countries.	Bales.	Dollars.
Argentine Republic	1	33
Austria	170	3,980
Belgium	257	6,275
Brazil	2	81
Central America	2	50
Chili	8	313
England	881	26,705
France	1,379	49,368
Germany	700	14,187
Italy	48	950
Japan	8	120
Mexico	4	179
Netherlands	478	18,559
Nova Scotia	1	23
Philippine Islands	2	112
Russia	7	300
Venezuela	3	74
Totals	3,951	121,309

Starch.

Countries.	Dollars.
Africa, Sierra Leone	6
South	2,071
Argentine Republic	163
Australia and New Zealand	1,979
Azores and Maderia	72
Belgium	56,054
Brazil	331
British West Indies	4,743
Central America	488
China	536
Cuba	1,840
Danish West Indies	2,530
Denmark	2,000
Dutch West Indies	57
England	185,300
France	1,792
Gibraltar	448
Germany	3,114
Hayti and San Domingo	916
Italy	1,750
Japan	457
Mexico	1,140
Netherlands	23,114
Newfoundland	150
Nova Scotia	434
Portugal	90
Scotland	44,679
Spain	180
U. S. Colombia	2,294
Venezuela	381
Total	339,109

Stearine.

Countries.	Pounds.	Dollars.
Africa, South	33,340	3,610
Austria	10,000	900
Belgium	7,127	1,058
Central America	114,120	7,714
Cuba	1,000	120
Denmark	10,063	1,130
England	1,202,591	106,717
France	804,516	25,062
Germany	541,465	43,388
Hayti & San Domingo	16,687	1,430
Mexico	3,104	331
Netherlands	1,130,962	97,047
Scotland	417,873	29,730
Sweden and Norway	11,523	1,325
Uruguay	6,600	726
Totals	4,310,971	320,288

Tallow.

Countries.	Pounds.	Dollars.
Australia & N. Zealand.	1,100	50
Belgium	434,385	22,970
Brazil	12,920	1,253
British Guiana	22,525	1,775
British West Indies	35,582	2,817
Central America	50,227	3,817
Chili	12,000	1,010
Cuba	45,571	2,402
Danish West Indies	2,202	178
Denmark	435,595	21,948
Dutch Guiana	19,487	1,304
Dutch West Indies	12,792	773
Ecuador	4,633	260
England	3,467,338	189,797
France	4,304,669	248,962
French Guiana	360	30
French West Indies	1,750	148
Germany	734,656	43,686
Hayti and San Domingo	354,906	21,708
Italy	918,061	55,653
Netherlands	202,384	10,220
Peru	101,469	6,665
Russia	13,307	756
Scotland	259,314	14,939
Turkey	281,057	20,970
U. S. Colombia	34,779	2,352
Venezuela	2,722	175
Totals	11,771,782	676,618

Tar.

Countries.	Barrels.	Dollars.
Australia & N. Zealand.	235	1,150
Brazil	13	56
British Guiana	197	879
British West Indies	235	1,036
Central America	10	51
Chili	10	48
Cuba	185	918
Dutch Guiana	21	76
Dutch West Indies	13	63
England	260	1,339
French Guiana	5	25
French West Indies	8	44
Hayti and San Domingo	94	434
Mexico	323	1,536
New Brunswick	205	492
Newfoundland	285	609
Nova Scotia	37	144
Peru	1	4
Philippine Islands	20	100
Sweden and Norway	3	15
U. S. Colombia	109	508
Venezuela	100	532
Totals	2,369	10,059

Turpentine.

Countries.	Gallons.	Dollars.
Africa, Sierra Leone	150	115
South	89,480	59,182
Arabia	400	279
Argentine Republic	135,500	77,173
Australia & N. Zealand.	123,730	72,394
Brazil	53,470	31,687
British East Indies	15,000	8,625
Singapore	150	85
British Guiana	1,900	1,235
British West Indies	11,261	6,680
Central America	4,130	2,598
Chili	63,160	39,362
China	7,150	4,142
Cuba	34,180	16,268
Danish West Indies	565	293
Dutch Guiana	50	30
Dutch West Indies	390	254
Ecuador	3,700	2,207
French Guiana	20	16
French West Indies	50	42
Hayti and San Domingo	2,400	1,291
Italy	6,000	3,360
Japan	9,500	5,343
Mexico	8,130	4,757
Newfoundland	3,512	2,233
Nova Scotia	4,880	2,583
Peru	8,370	4,883
Russia	2,000	1,180
Sweden and Norway	100	80
Turkey	320	182
U. S. Colombia	8,209	5,197
Uruguay	17,278	9,466
Venezuela	4,960	3,218
Totals	620,495	364,440

Varnish.

Countries.	Gallons.	Dollars.
Africa, South	8,067	8,220
Argentine Republic	2,193	3,609
Australia & N. Zealand.	3,337	4,242
Austria	210	452
Azores and Medeira	50	78
Belgium	32,070	32,971
Brazil	1,761	2,266
British East Singapore	30	20
British Guiana	105	57
British West Indies	2,592	2,094
Central America	1,062	928
Chili	1,820	2,138
China	324	236
Cuba	16,013	12,990
Danish West Indies	100	74
Denmark	6,459	12,292
Dutch West Indies	140	98
Ecuador	147	157
England	113,413	84,852
France	21,044	26,320
French West Indies	70	110
Germany	19,692	30,045
Hayti and San Domingo	133	142
Italy	1,795	9,213
Japan	2,959	4,022
Malta	10	4
Mexico	10,205	10,289
Netherlands	11,104	19,171
Newfoundland	95	205
Nova Scotia	476	464
Peru	35	21
Philippine Islands	1,411	1,324
Portugal	216	447
Russia	360	522
Scotland	49,883	33,560
Spain	1,152	1,406
Sweden and Norway	2,463	4,234
Turkey	90	86
U. S. Colombia	2,823	2,786
Uruguay	1,098	881
Venezuela	759	555
Totals	323,761	313,581

Wax, Paraffine.

Countries.	Pounds.	Dollars.
Africa, South	674,219	36,963
Argentine Republic	522	29
Australia & N. Zealand.	3,431,018	167,937
Austria	2,360,531	108,292
Belgium	3,289,472	145,283
Brazil	132,996	7,198
British East Singapore	96,548	4,522
British West Indies	4,780	215
Central America	168,780	9,888
Chili	39,748	1,352
China	971,259	48,565
Cuba	10,043	199
Denmark	24,595	1,200
England	35,194,822	1,830,964
France	650,592	30,753
Germany	7,949,380	423,947
Greece	17,001	815
Hayti & San Domingo	1,017	58
Italy	6,625,014	358,677
Japan	4,003,204	331,245
Mexico	3,524,001	175,217
Netherlands	2,488,612	126,075
Peru	17,500	1,068
Portugal	240,113	12,075
Russia	162,711	7,280
Scotland	934,496	44,989
Spain	1,115,094	63,240
Sweden and Norway	223,053	11,103
Turkey	144,981	7,590
U. S. Colombia	34,112	2,080
Venezuela	3,010	205
Totals	74,533,824	3,958,064

Wax, Bees.

Countries.	Dollars.
England	1,785
France	407
Germany	5,788
Total	7,980

Whalebone.

Countries.	Pounds.	Dollars.
England	1,275	5,300
France	26,642	134,020
Germany	10,490	52,286
Italy	10	50
Totals	38,417	191,656

White Lead.

Countries.	Packages.	Dollars.
Australia & N. Zealand.	11	181
Brazil	2	13
British West Indies	65	153
Central America	11	122
Chili	4	36
China	74	2,249
Cuba	210	1,373
Danish West Indies	12	81
Denmark	26	951
Dutch West Indies	27	86
France	3	61
Hayti and San Domingo	19	94
Mexico	237	904
Nova Scotia	112	1,981
Philippine Islands	63	240
U. S. Colombia	231	1,305
Venezuela	6	38
Totals	1,113	9,868

Zinc, Oxide.

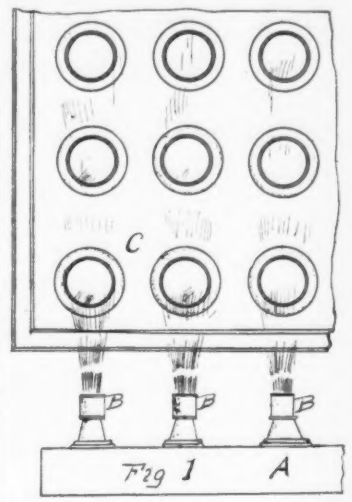
Countries.	Barrels.	Dollars.
Australia & N. Zealand.	25	275
Austria	300	2,210
Belgium	130	802
Cuba	1	14
Denmark	2,050	18,040
England	13,511	134,514
France	5,200	37,729
Germany	379	2,771
Italy	1,880	14,884
Japan	50	695
Netherlands	284	1,955
Scotland	2,000	20,000
Totals	25,810	233,889

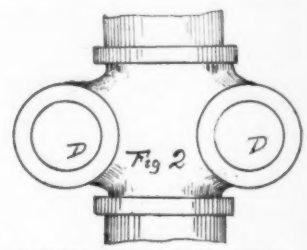
Petroleum Fuel for Ships.

The late successes in the application of oil fuel to the steam craft of the United States Navy has opened a channel by which the same fuel can be applied to steam craft of all kinds. The use of oil fuel as a substitute for coal or other material on shipboard is of course of general adoption, because the work has been in operation for some time; but it is not long since the use of oil for common craft has been beyond the experimental stage. Therefore the annexed drawings and descriptions may interest oil manufacturers and dealers. In the use of the oil for marine purposes the requisite air for combustion should be heated before entering the furnaces. Gasification of the oil is assisted if the process is complete. In figure 1 we present a sketching of one of the systems for developing this idea. Your correspondent observed a boiler which had been altered to answer the purposes. The flues were calculated to receive into them the drafts of heated air from the ject pipes (b, b, b). The front of the boiler, with the flues, is marked c. The supply pipe of oil for burning is marked a. This pipe carries the petroleum from the supply tanks to the jets. Air is admitted by a system of perforations arranged in the pipe so that when the oil fumes become ignited the proper distribution of air results. A strong flame occurs and the heat derived is carried by the suction through flues of the boiler. A uniform heating of the tube system results and the contents of the boiler become intensely hot and a good steam generation occurs.

The oil, of course, must be heated so that it atomizes readily. This calls for proper fittings and adjustments. Figure 2 is a drawing of one of the pipe unions utilized in this service. It consists of the openings (d, d), which are properly threaded to receive the threaded pipes of corresponding size.

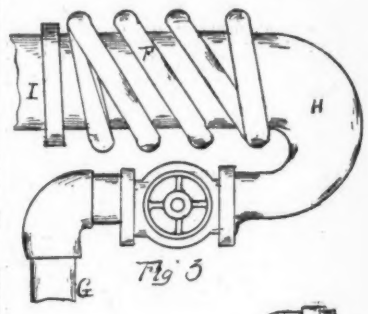
Complete combustion is one of the

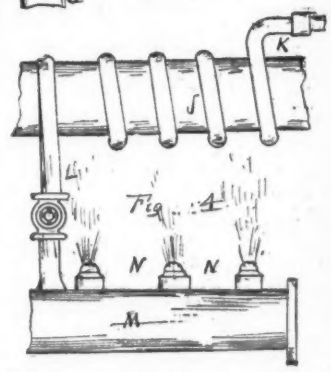




OIL BURNING DEVICES FOR SHIPS.

requisites of the tests, and this work is conducted with care. The next views show some of the apparatus employed by the people engaged in applying oil fuels to steamship craft service. This is a cooling arrangement, in which the supply of oil passes over the water pipe (i), in coil form, the coil pipe being indicated (f). The oil is thus carried around the cooling pipe and the temperature adjusted as needed. The





COOLING AND HEATING APPARATUS FOR OIL FUEL BURNING ON SHIPS.

water enters the pipe at g, passes around the elbow (h) and emerges at i to waste pipe.

Figure 4 illustrates a device used by some steamship people for effecting proper combustion of the oil. The oil is heated in this case, and the process is brought about by the coil of pipe with the oil passing about the main tube (b) as at k. This pipe then goes down to l, where there is a valve, and thence to the burner (m). The jets are signified n, n. The flames are caused to produce the heat necessary to maintain a good stiff temperature on the oil conveyer (j), and thus the oil receives the proper heating before it is received at the temperature governing devices, one of which is illustrated in the previous figure.

(Special Correspondence to the Reporter.)

Production of Magnesite.

Washington, July 17, 1903.

The production of magnesite in the United States during 1902 decreased materially, according to the annual report of the United States Geological Survey, which has just been completed, and which is of special interest to the trade, owing to the combination recently effected by the principal manufacturers engaged in the production of epsom salts. The total output in 1902 was 3,466 short tons, valued at $21,362, as compared with 13,172 short tons, valued at $43,057 in 1901; a decrease of about 75 per cent in quantity, with only about 50 per cent. in value. Following is an advance abstract of this report:—

"The mineral magnesite, or magnesium carbonate (MgCO3), in the pure state is composed of carbon dioxide (CO2) 52.4 per cent. and magnesium oxide or magnesia (MgO) 47.6 per cent. It frequently contains, however, a small quantity of magnesium silicate, and at times iron carbonate is present. The color is white, often with a yellowish or grayish tinge. In appearance the massive form is similar to unglazed porcelain, and, though brittle, it is exceedingly hard to drill. It is found in talcose schist, serpentine and other magnesian rocks, also in gypsum and as veins in serpentine.

"The production of magnesite in the United States continues to be limited to California, and during 1902 the quantity reported was 3,466 short tons, valued at $21,362, as compared with 13,172 short tons, valued at $43,057 in 1901. The production during 1902 consisted of 1,230 short tons of crude product, valued at $5,582, and 1,050 short tons of calcined product, valued at $15,780, the latter being equivalent to 2,236 short tons of crude product, which are included in the total of 3,466 short tons of crude magnesite.

"The following table gives the quantity and value of crude magnesite produced in the United States during the past six years:—

	Quantity.	
Year.	Short tons.	Value.
1897	1,143	$13,671
1898	1,263	19,075
1899	1,280	18,480
1900	2,252	19,333
1901	13,172	43,057
1902	3,466	21,362

"In the crude state magnesite is used in the manufacture of carbon dioxide gas by treatment with sulphuric acid or by the application of heat alone. In the former case magnesium sulphate is obtained as a by-product, which, being dissolved in water, filtered and crystallized, yields Epsom salts (MgSO4.7H2O). During 1902 it is estimated that at least 50,000 barrels of this salt were produced in the United States. Early in 1903 a combination was effected by the various concerns engaged in the manufacture of Epsom salts. The chief use of the carbon dioxide gas derived from this source, in both the gaseous and liquefied forms, is to charge, or carbonate, mineral waters. On account of its antiseptic properties the gas is used also in place of the ordinary pump or engine to raise beer and similar beverages. Its use in mechanical refrigeration in warm countries and on shipboard is being developed.

"In its calcined state (which corresponds to magnesia, MgO) the consumption of magnesite has increased very largely since 1899, owing to its uses in the form of bricks or concrete as a refractory lining for open-hearth furnaces and converters in the steel industry, as a lining for rotary kilns used in the manufacture of Portland cement, as a non-conducting covering for boilers, steam pipes, etc., to prevent loss of heat, and more recently in electric furnace construction as a refractory material. It is also used in the manufacture of paper stock by the sulphite process, the wood pulp being digested under pressure with sulphurous acid or calcium and magnesium acid sulphite, whereby the lignin which forms the coloring matter of the wood, as well as other incrusting material of the fiber, is converted into soluble products, which are subsequently removed by washing.

"The production of crude magnesite is practically under the control of one firm, which ships the entire output to manufacturers of carbon dioxide gas for the production of the gas by calcination; the calcined product, which is essentially magnesium oxide, or magnesia, is returned to the shipper and is subsequently utilized by paper mill concerns.

"The demand for calcined magnesite for this purpose in the West is limited, and only a small portion of the available supply is utilized—a trade condition which is reflected by the different unit values of the calcined product in various years considered in connection with the quantities produced. Thus in 1900 the supply amounted to 1,013 short tons, and the average value per ton was $15.70; in 1901 the output of 4,726 short tons far exceeded the demand and the average value decreased to $5.58 per ton; in 1902, when the supply reached the normal consumption of 1,050 short tons, the average value per ton rose to $15.

"The import of crude and calcined magnesite during 1902—chiefly from Greece and Austria—amounted to 49,786 short tons ($373,928), as compared with 33,461 short tons in 1901. It is thus seen that the United States furnishes a small proportion only of the total consumption.

"The total quantity of magnesite consumed in the United States is approximated by adding together the domestic production and the importation, although in the latter case there is no distinction made between the crude and calcined magnesite. On this basis the total consumption of magnesite during 1902 was 53,252 short tons, as compared with 46,633 short tons in 1901, and with 31,073 in 1900.

"In the United States magnesite occurs in several localities in Massachusetts; near Baltimore, Md.; in Chester and Lancaster counties, Pennsylvania; in Tulare, Napa, Alameda, Mariposa, Stanislaus, Santa Clara and Tuolumne counties, California, and recently a large deposit of magnesite has been reported near Walkers Pass, Kern County, Cal. As a commercial product, however, its mining is practically confined to California. The principal producing property during 1902 is near Porterville, Tulare county, where the mineral occurs in a series of vertical and flat veins up to ten feet in width, some of which outcrop boldly, having the wall-rocks of serpentine and granite. A few veins have been traced on the surface for several thousand feet. A large quantity of mineral has been disclossed by open cuts and a tunnel. A 10-ton kiln, using crude oil as fuel, serves to calcine the product, which is then shipped to paper mills. A second kiln will be erected as soon as the demand warrants it. The calcining treatment, at a temperature of 2,500 degrees F., occupies from three to three and one-half hours. The carbon dioxide gas which is expelled is allowed to escape into the air. Owing to the fact that during calcination magnesite loses from 48 to 52 per cent. of its weight, the cost of the calcined product at the kiln is stated to be from $12 to $14 per ton.

"A feature of the development of the magnesite industry in California is to bring about the reduction of the cost of calcination to a point which will admit of the shipment of the calcined product to Pittsburgh."

(Special Correspondence to the Reporter.)

Alleged Lead Ore Duty Frauds.

Washington, July 17, 1903.

Highly colored and wholly misleading statements have been published during the past week to the effect that the Treasury Department has discovered "gigantic irregularities" in the collection of duties on Mexican lead ores imported into the United States at El Paso, Tex. It has been further stated that there irregularities have been practiced on the government for a series of years, and that hundreds of thousands of dollars in duty have thereby been diverted from the Treasury.

The Reporter's correspondent is in position to state that the Treasury Department has received no reliable information upon which such astonishing statements could properly be based, although it is true that a very careful investigation is now in progress to determine the facts with regard to charges framed in vague and general terms, which have been filled with the collector at El Paso by a former subordinate, who recently resigned the position of storekeeper in the El Paso custom house, because the Treasury Department declined to permit him to organize a commission to investigate his own charges, prefering that the inquiry should be conducted by experienced special agents.

The first information with regard to the alleged irregularities received by the Treasury Department came in the course of a communication from Collector Garrett, at El Paso, who about two weeks ago advised the Secretary that Storekeeper John Fulkerson had filed charges at the custom house that a certain large smelting concern had for years evaded the payment of large sums in duties on Mexican lead ores by manipulation of the assay etc. The collector stated that Fulkerson desired to be made the chairman of a special commission to conduct a detailed investigation into the alleged irregularities, and as collector he would earnestly recommend the adoption of the suggestion. It was clearly apparent that whatever information Fulkerson might possess, his purpose in seeking appointment as chairman of the special commission was to avail himself of the moiety laws, which provide that compensation for the detection of fraud in the customs service is only to be paid to such persons as are both the detectors and the seizers of the goods against which the government has claims for smuggling, undervaluation, fraudulent sampling, etc.

Under the circumstances the department concluded that whatever foundation there might be for Fulkerson's charges, it would be preferable to have an investigation made by experienced and disinterested special agents, and, therefore, Special Treasury Agents Johnson, of New Orleans, and Evans, of El Paso, were instructed to report to Collector Garrett and institute a rigid inquiry. At the same time a telegram was sent to the collector, disapproving his recommendation for the appointment of a special commission, and directing him to instruct Storekeeper Fulkerson to give the special agents all possible assistance in securing the proof of his charges.

Pending the investigation of the special agents, and during the absence of Fulkerson from El Paso, a statement appeared in an El Paso paper referring to the proposed investigation, and suggesting that Fulkerson was unwilling to substantiate his charges, and had, therefore, absented himself from his post. Upon his return, Fulkerson telegraphed his resignation to the department, and refused to turn over his information to the special agents, on the ground that they "did not possess the discretion of secrecy and could not obtain results." It is assumed that Fulkerson desired the department to gather the impression that the special agents inspired the publication in the El Paso paper referred to. Instructions were therefore telegraphed to Collector Garrett, directing him not to accept Fulkerson's resignation, and the special agents were instructed to file charges against Fulkerson, to be made the basis of his summary removal from the service, in case he refuses to furnish information in support of his written allegations, originally filed with the collector.

As will be seen, the department has absolutely no information as to the accuracy of Fulkerson's statements regarding the alleged irregularities, but on the other hand, it has evidence of his unwillingness to co-operate with the Treasury agents, who, according to the usual practice in such cases, have been detailed to make an investigation. While, therefore, the department intends to make a rigid inquiry to ascertain whether frauds have been practiced by lead ore importers, the officials will not be surprised should the special agents find little or no foundation for the sensational charges filed by Fulkerson.

London Linseed Market

Under the influence of liberal imports, continued large shipments, and better crop reports from America and Russia, the tone has continued flat, and prices have further declined about 1s. per quarter, a fair amount of business having been transacted both for London and the Continent. Offers from America are again more in evidence, and at lower prices; the option market at Duluth has declined almost every day, values now being lower than for for a very long time past. Calcutta seed is now selling at a price very near the level ruling in 1898, when the average price for the whole year was 35s. 6d. The total shipments in that year amounted to 4,705,000 qrs., and, judging from the exports for the six months to June 30, there is every prospect of this year's shipments showing a large increase over that figure, India not yet having shipped much more than one-third of its surplus, and the Plate and America also holding much larger stocks than in any previous year at this time. Russia is also reported to have a fair quantity left over from the old crop, while the growing crop promises a better yield than either of the last three years.

Six months of the year have now elapsed, and, as shown by the table given below, the shipments during that period have been very large indeed, and much above the average of previous years. The increase is nearly all to the Continent. These large shipments and the knowledge that there have been ample supplies available for all requirements, have caused the continued steady decline in values, which, with occasional slight reactions, has been experienced during the last twelve months, and bringing the price of Calcutta seed down to 36s., against 51s. 6d. on July 1, 1902. The production of linseed, after poor yields for three years, has considerably exceeded the consumption, and for this reason alone prices are likely to keep at a low level for some time to come. At the lower level there ought to be a fair increase in the consumption of seed, and the trade may be tempted to reconstitute their stocks and hold larger quantities than has been the case for the past three years.

LINSEED SHIPMENTS.

	Six months to June. Qrs.	12 months to Dec. Qrs.	Average price. of Calcutta.
1903	3,710,000	.....	....
1902	2,960,000	4,397,000	50/6
1901	2,705,000	4,190,000	54/1
1900	2,477,000	3,899,000	53/9
1899	2,754,000	4,924,000	39/6
1898	2,056,000	4,705,000	35/6

Present prices of linseed, compared with the last three years:—

	Calcutta June-July shipment to London.	Hull.	Hamburg.	Argentine June-July to Hull.
Now	36/	36/3	36/3	34/9
One week ago	37/6	38/	38/	35/9
Month ago	39/6	39/6	39/6	37/3
One year ago	51/6	51/9	52/9	49/6
Two years ago	54/	54/	54/6	52/3
Three years ago	55/6	56/3	55/3	—/

The average price of Calcutta linseed on the spot in London during the month of June was 38s., against 52s. 9d. in the same month last year, 51s. 3d. in 1901, and 52s. 11d. in 1900.

The shipments from the Argentine to Europe this week were 6,300 tons, and since Jan. 1 433,150 tons, against 307,650 tons in the corresponding period last year, and 307,900 tons in 1901.

The shipments of linseed from India from April 1 to date amounted to 991,000 qrs. (Calcutta 615,000 qrs. and Bombay 376,000 quarters), against 968,000 qrs. last season (Calcutta 616,000 qrs. and Bombay 352,000 qrs), and 892,000 qrs. in 1901 (Calcutta 608,000 qrs. and Bombay 284,000 qrs).

From Russia and the Danube the exports of linseed from Aug. 1 to June 27 have amounted to 615,500 qrs., against 289,500 qrs. in the previous year and 798,500 qrs. in 1900-1901.

The shipments of linseed from all countries last week amounted to 59,000 qrs. for the United Kingdom (including orders) and 73,000 qrs. for the Continent, together 132,000 qrs. (against 83,000 qrs. in the same week last year), making the total since Jan. 1, 1,219,000 qrs. to the United Kingdom and orders, and 2,356,500 qrs. for Continent, together 3,575,500 qrs., against 1,210,000 qrs. for the United Kingdom and orders, and 1,664,000 qrs. for the Continent, total 2,874,000 qrs in the previous year.

The receipts of linseed in the Argentine for the week ended June 4 were 64,000 qrs., against 51,000 qrs. in the previous week, and 40,000 quarters in the same week last year. The total receipts from Jan. 1 to June 4 amount to 2,401,000 qrs., against 1,695,000 qrs. during the same period last year.

The receipts of linseed at Bombay for the week ended June 11 amounted to 5,370 tons, against 5,419 tons in the previous week and 1,910 tons in the same week last year. The total receipts at Bombay from Jan. 1 to June 11 amount to 113,655 tons, against 85,655 tons in the corresponding period in 1902.—Beerbohm's Trade List.

Problems in the Fat Industry.*

BY DR. J. LEWKOWITSCH.

(Continued from July 13, page 29.)

Processes involving the decolorizing and bleaching of fats and oils are well understood and largely practiced. Of course, it cannot be expected that a bleaching process which is suitable for one fat or oil can be straightway applied, with equal success, to any other fat or oil, or even to one to which it stands in organic relationship. Each individual fat or oil requires special investigation as regards the employment of suitable chemicals, and the temperature at which they should be applied, besides a number of other conditions on which success depends. The object of bleaching is not only to remove coloring matter for the time being, but to remove it so efficiently that the color, or even a darker shade, does not "revert" some time after the fat or oil has been bleached. Patents claiming to effect this object appear annually in great numbers and disappear again when it has been shown that the coloring matter does "revert" to a larger or smaller extent after the material has been converted into soap, in the case of soapmaking stock. Thus, one of the simplest and most frequently practiced processes, that of bleaching tallow, does not produce soaps as good in color as those made from the freshly-rendered tallow. Further, the bleaching of bone fat has not even reached so satisfactory a state as that of bleaching tallow. Not only must each kind of fat or oil be considered a special problem, but frequently even different varieties of one of the same fat or oil cause the same difficulties as would a new individual. To mention an example, the bleaching of the softer kinds of palm oil, such as Lagos or Old Calabar, offers very little difficulty, and even a novice in the soap works is able to carry out the process successfully. But the hardest kinds of palm oil, such as Congo oil, have hitherto withstood all attempts to bleach them, and I strongly recommend this problem to the attention of the ambitious technologist.

I have said enough to show that the refining of fats and oils offers very great scope for the exercise of the inventive faculty, especially so since powerful bleaching agents, such as ozone, peroxides, persulphates, and even percarbonates are within easy reach of the experimenter.

2. Still greater promise of success to an inventor seems to be offered by the second class of industries, namely, those in which the glycerides undergo a more or less pronounced chemical change without, however, being broken up into their constituents, viz., fatty acids and glycerine. For the most of the processes carried out in the industries that fall under this head are but incompletely understood, and really important progress can only be expected after gaining a better theoretical insight into the reactions which underlie the changes the fats and oils undergo.

I mention in the first instance the industry of blown oils. The question, "what is the chemical nature of blown oil?" cannot be answered to the satisfaction of the scientific inquirer. We know, as the name implies, that the oils are obtained by blowing air into them, but the actual change the molecule undergoes is, as yet, unknown. The oils become specifically heavier, and oxygen has undoubtedly been absorbed, but in what form can only be surmised. It is likely that hydroxyl groups have been formed, and the rise in the acetyl value of the oil seems to favor this view. Some of the acids have been converted into what I ventured to term "oxidized acids," their most characteristic property being insolubility in petroleum ether. But as these oxidized acids also possess a high acetyl value, it is difficult to decide in favor of either explanation. Possibly both views will have to be ad-

* Paper read at a recent meeting of the London Section of the Society of Chemical Industry.

mitted. Moreover, some of the acids may have been broken up into acids of lower molecular weight, as instanced by the rise in saponification value. Since all these changes are taking place simultaneously, the problem would appear to be an analytical one in the first instance. Once this is solved, the problem of how to find extended application for these oils will become easier to attack. Patient research is required here, for, up till now, so little has been done in this direction that it is even a moot point whether the blown oils are really as efficient lubricants as they have been heralded, when they were ushered into the market with a great flourish of advertisement. If the chemical change can be so controlled that hydroxylated groups only are formed, we would be able to produce castor oil artificially. At present the price of castor oil is comparatively low, but the moment we are able to turn its exceptional qualities to extended use, a demand may spring up which may render the artificial productiontion a more pressing problem.

Equally little is known of the chemical change taking place in the preparation of boiled oil and its cogeners. Notwithstanding the enormous extent to which the industry of boiled oils and their offspring has attained, it has very largely remained a truly empirical industry much as it was handed over to us by its inventor, the celebrated Dutch painter, van Eyck. We know that when an oil like linseed oil is exposed to the atmosphere it absorbs oxygen, taking up in the course of a few days as much as 20 per cent., and drying to an elastic skin. What the ultimate product is, we are still unable to say with certainty. We further know that the time required for drying can be considerably shortened by mixing metallic salts or oxides, such as white lead and zinc oxide, with oil. The time required for drying can be further shortened by treating the oil with certain oxides or peroxides while heating it at a higher temperature, say 220-250 deg. C., or, as the technical term runs, by "boiling" the oil. What change the oil has undergone by this somewhat severe treatment we are as yet unable to say. It was assumed for a time that the oil became oxidized, the glycerine being attacked in the first instance; but analysis has shown that this is wrong, since boiled oil retains almost its entire quantity of glycerine. Moreover, practice has proved that the glycerine is necessary in the boiled oil, for attempts to prepare boiled oils from the fatty acids only have led to useless products. Equally unfounded is, therefore, the suggested explanation that the oxides act as hydrogen carriers during the "boiling." The process of "boiling" does not consist in the oxidation of oil, caused by the absorption of oxygen, as we are able to show by analysis that oxidation cannot have taken place to any great extent. In confirmation of this we find that the amount of oxidized acids is not considerable. Nor is the decrease in the iodine value, which we can also regard as a measure of the oxygen absorption, very pronounced. Moreover, we have well drying boiled oils possessing very high iodine numbers. In the investigation of an ozone process, I have even noticed that the iodine values of the treated oils, which have acquired all the properties of "boiled" oils, were very little lower than those of the original oils. Nor is a high temperature required for the preparation of boiled oils, as we are able to obtain an oil having the property of boiled oil by carefully grinding linseed oil in the cold with manganese borate; and since liquid driers have been introduced, much lower temperatures have been found sufficient for the preparation of these oils on a large scale. In fact, all that seems necessary is to dissolve the liquid driers in linseed oil at a temperature of 120-150 deg. C. Opinions still differ as to whether the oils prepared at these temperatures by means of liquid driers are as good as those produced by the old process; but there is certainly no doubt that the oils prepared in the cold—or, as the Americans term it, "boiled through the bung-hole"—are inferior in quality. Now, if a mere dissolving of the drier in the oil is all that is required, then no important chemical change can have taken place. Yet Hehner and Mitchell have shown that a very distinct difference exists between linseed oil and a specimen of boiled oil they examined, inasmuch as the latter gave no insoluble hexabromides. In their case, the "boiling" of the sample must have been carried very far, as two samples of "pale boiled" and "double boiled" linseed made on a large scale yielded, in my laboratory, 20.97 per cent. and 13.05 per cent. of hexabromides respectively, whereas the linseed oil from which it was made gave 24.15 per cent. of hexabromides. It remains to be seen whether the boiled oils prepared by means of liquid driers show a similar decrease, or any.

This much appears to be certain, that a complete solution of the drier is required, and it is most likely that in the older process the dissolving of the drier was effected in the very process of boiling, through the lead oxide saponifying a portion of the oil, as evidenced by the escape of a small quantity of acrolein during the boiling of the oil.

The chemical change which takes place when linseed oil dries to an elastic skin, is, as stated before, unknown. In the boiled oils, the drying goes on at an accelerated pace, favored by the incipient oxidation which has been induced by boiling in the old sense of the process or by adding liquid liquid driers which seem to act as oxygen carriers. In the light of modern views, this would appear to lead to the explanation that the driers act as catalysts, inasmuch as a small quantity only is required to accelerate the oxidation.

Here lies a wide field open for investigation, for it cannot be expected that full use of the curious properties of drying oils can be made before the chemistry of the change is fairly understood. Nor until then can we hope to bring into full practical use all those drying oils that seem to be destined to become substitutes of linseed oil, the drying oil par excellence. To name one or two such oils, I may refer again to safflower oil, and also to candle nut oil, both of which I have investigated in this respect. An insight into the chemical change which underlies the preparation of boiled oils should go far to stop that annual crop of patents and secret processes which make use of the oxygen absorption property of certain resins in order to supplant the drying oil, by more or less worthless concoctions of oil and resin.

It is uncertain, at any rate unknown, whether the skin to which linseed oil dries is identical with the "linoxyn" of the linoleum industry. This was considered, up to a few years ago, to be the ultimate oxidation product of linseed oil, but you will remember that W. F. Reid has shown that oxidation proceeds further in the course of time—the oxidized linseed oil being converted into a viscous liquid, heavier than water, termed by him "superoxidized linseed oil." As the latter is soluble to a considerable extent in water, the gradual destruction of linoleum is readily explained. Possibly when linseed oil is blown with air, or when boiled oil has been blown too strongly, a small quantity of Reid's superoxidized linseed oil is formed. This would appear to account for the poor drying properties of those oils.

Another chemical change in the constitution of linseed oil which is not yet understood is brought about by heating linseed oil to a high temperature in the absence of driers, as is done in the making of lithographic varnishes and printing inks. Reasoning by analogy, we may assume that polymerization takes pace, but with this convenient word our explanation ends. The analogy has been derived from the closer study of castor oil, which undoubtedly does become polymerized on heating, the ricinoleic acid forming di-, tri-, tetra-, and penta-ricinoleic acids. Such polymerization products have not hitherto been thoroughly examined, nor have they, with the exception of linseed oil products, been employed technically. And, yet, it seems that such products as are obtained by heating castor oil until it is converted into a solid mass, and the jelly-like mass into which Chinese wood oil is changed on heating, are very likely to find technical application on account of their elasticity and apparent durability.

If, in the treatment of drying oils, we substitute sulphur for oxygen, the action becomes a more energetic one. The vulcanized oils so obtained have already acquired commercial application on account of their cheapness, as witness the sad state in which we find our india-rubber tubing after very short use. Vulcanized fish oils have also been brought somewhat prominently into the market, and it must be a matter for regret that the working out of the process for the preparation of such products as volenite, maponite, etc., have not been completed on a small scale before they were placed before the public, as non-success only serves to discredit further technical efforts.

The nature of the change the fats and oils undergo in the vulcanizing process is almost completely unknown, and we have to rely on mere reasoning by analogy in our attempts to explain how the sulphur or sulphur chloride is absorbed by the unsaturated glycerides.

Here, again, appears to be great scope for investigations on technical lines. For, in my opinion, we have only touched the fringe of possibilities in this domain. The inventor with new ideas should find ample reward for his ingenuity in the creation of new industries, based on the useful properties of fats and oils. As an example of what can be done in this direction, I wish to point to the work of W. F. Reid. The invention of velvril material not only shows that there are still great possibilities in the employment of castor oil, as I have mentioned already, but that there is room for the introduction of new chemical reactions into the industry of fats and oils.

3. The technology of fats unquestionably reaches its highest development in those industries which are based on the saponification process. This, no doubt, is due to the chemical process being fully understood. The equation, expressing the chemical change, is the well-known one—

$$C3H5(OR)3 + 3H.OH = C3H5(OH)3 + 3R.OH.$$

Up till recently this equation was ununderstood to express fully the chemical change, but, as has been shown by Geitel and by myself, it must now be looked upon as expressing the sum of three equations, each of which denotes a well-defined stage as saponification progresses. According to this view, the saponification of a triglyceride passes through the diglyceride and monoglyceride, until finally free fatty acids and glycerin are obtained. I have mentioned this theoretical speculation, as it points to a possible preparation of diglycerides and monoglycerides, if only we are able to arrest the progress of the reaction at the desired point. The advantage of such a procedure would lie in the preparation of glycerides capable of yielding very high percentages of glycerin. To take an example, tristearin yields, theoretically, 10.34 per cent. of glycerin, whereas, distearin yields 14.74 per cent. and monostearin is capable of yielding 25.7 per cent. of glycerin. The problem appears attractive enough to demand more than a passing thought, although the difficulties may seem, at present, insurmountable.

Another problem that suggests itself is to replace H by an alcohol radicle, say the ethyl or amyl radicle, in the above equation. Since the corresponding alcohols act as weak bases, the reaction is not so impossible as it appears at the first glance, and with anhydrous materials, and under high pressure, especially if a small quantity of sodium alcoholate is employed as a catalyst, it is not unlikely to proceed in the desired direction. The fatty acids radicles would thereby become converted into simple esters, which can be much more readily saponified, and, moreover, with a theoretically insufficient amount of alkali. If the alcohol can be recovered fully, the process may become feasible. For a number of years I have looked fondly on this idea without having had the opportunity of investigating it. A recent patent taken out by Liebreich, for the treatment of glycerides with aromatic amides, embodies a similar reaction, but the yield stated by the author seems to place this process out of reach of practical application.

(To be continued.)

Calculations for Manufacturing Processes.

BY L. REUTER.

Cresol Disinfectants.

The great value of the cresols as disinfectants has been generally recognized; unfortunately, a number of the products found in the market are grossly adulterated, in some cases instead of creosote oil containing from 20 to 25 per cent. cresols, only dead oil is used and even kerosene oil has been found as adulterant.

In fact, large hospitals, charity institutions, poorhouses, prisons and other municipal and government institutions requiring a good and reliable disinfectant, could, at a very cheap price, manufacture all that they need and they would then have a guarantee that the article has the required strength and efficiency.

For the manufacture of saponified coal-tar creosote, which is one of the best cresol disinfectants, in addition to water, the following three crude materials are required:—

1. Creosote oil, containing from 20 to 25 per cent. cresols, as obtainable at 15 cents per gallon, in barrels containing about 50 gallons, or, including freight, etc., at 3 cents per pound.

2. Caustic soda, 70 per cent., per 100 pounds about $2.50.

3. Rosin "D," 100 pounds, $2.

To carry out the manufacturing process 5½ pounds of caustic soda are put in a kettle and about 19 gallons of common water added, from time to time stirred until dissolved.

The kettle containing the caustic soda solution is put on a small fire, heated, and 30 pounds of rosin added in small quantities; the heating and boiling is continued until all the rosin is dissolved. It will take about two hours until a clear rosin soap, weighing about 45½ pounds, is obtained. The rosin soap, while still hot, is at once strained through cheesecloth into another container, and 60 pounds of creosote oil containing 20 to 25 per cent. cresols added and thoroughly mixed. He thus obtained saponified coal-tar creosote. After it has been strained again through cheesecloth, if necessary, it is ready for use.

CALCULATION.

5.5 lbs. caustic soda, 2 cents per lb.	$ .11
30 lbs. rosin, 2 cents per lb.	.60
60 lbs. of creosote oil, 3 cents per lb.	1.80
Wages	1.00
10% depreciation of a capital of $50 (300).	.02
Cheesecloth	.02
100 lbs. of saponified coal tar creosote, 1 lb. 3.55 cents.	$3.55

When larger, quantities are to be made, the cost price will be, of course, still lower.

Exports of Lard, Etc., for June.

O. P. Austin, chief of the Bureau of Statistics, submits the following statement of the exports of lard, tallow, oleo oil, etc., from the United States during the month of June, 1903, and during the twelve months ending June 30, 1903, to which we add tables giving the quantities exported each month since January, 1901, as also the total for each year:—

LARD.

	Pounds.	Dollars.
June, 1903	37,120,061	3,674,502
June, 1902	38,106,697	3,792,964
Twelve months, 1903	482,438,554	50,006,941
Twelve months, 1902	545,387,606	51,323,741

	1901.	1902.	1903.
January	58,338,126	40,333,979	63,084,344
February	50,870,389	45,681,026	44,086,188
March	61,170,472	57,032,785	40,927,573
April	41,917,692	47,007,465	33,406,925
May	52,777,162	37,584,730	33,232,335
June	48,360,407	38,106,697	37,120,061
July	43,649,222	32,966,907	.....
August	48,802,972	30,070,085	.....
September	42,726,040	32,349,704	.....
October	42,985,283	34,151,685	.....
November	47,819,200	38,688,815	.....
December	53,658,207	62,321,566	.....
Totals	593,075,172	496,335,444	.....
Average	49,422,931	41,361,287	41,976,237

TALLOW.

	Pounds.	Dollars.
June, 1903	4,349,631	232,522
June, 1902	1,369,094	90,614
Twelve months, 1903	27,135,049	1,615,209
Twelve months, 1902	33,679,354	1,906,626

	1901.	1902.	1903.
January	6,283,312	2,298,494	2,798,166
February	5,728,050	2,525,531	2,449,270
March	5,914,402	2,241,102	2,643,227
April	4,516,886	2,038,688	2,469,557
May	3,816,944	1,367,275	3,189,493
June	3,306,036	1,369,094	4,349,631
July	3,876,334	895,733	.....
August	3,280,228	639,865	.....
September	3,960,761	2,203,500	.....
October	2,414,302	1,017,001	.....
November	3,622,016	1,622,729	.....
December	4,689,530	2,990,461	.....
Totals	51,408,751	21,158,918	.....
Average	4,284,063	1,763,243	2,983,224

OLEO OIL.

	Pounds.	Dollars.
June, 1903	13,583,290	1,201,693
June, 1902	8,309,706	800,700
Twelve months, 1903	125,848,134	11,966,830
Twelve months, 1902	138,215,571	12,225,620

	1901.	1902.	1903.
January	13,252,419	10,262,743	8,898,969
February	8,714,704	8,765,687	10,614,037
March	12,438,848	8,168,742	18,471,622
April	13,369,520	12,544,624	10,678,051
May	17,585,125	9,304,298	13,123,856
June	17,496,251	8,309,706	13,583,290
July	13,212,631	8,563,900	.....
August	15,759,022	7,118,610	.....
September	14,351,234	7,282,182	.....
October	14,028,348	11,881,226	.....
November	10,066,254	7,134,425	.....
December	13,342,282	8,710,456	.....
Totals	163,607,642	108,064,589	.....
Average	13,633,970	9,005,382	12,561,637

OLEOMARGARINE.

	Pounds.	Dollars.
June, 1903	953,571	95,330
June, 1902	263,607	27,878
Twelve months, 1903	7,442,447	772,959
Twelve months, 1902	5,684,637	593,143

	1901.	1902.	1903.
January	388,733	951,232	318,417
February	649,495	549,074	731,978
March	348,277	752,692	842,037
April	695,198	482,918	861,172
May	545,992	486,175	1,088,222
June	379,391	263,607	953,571
July	387,122	243,192	.....
August	343,662	381,889	.....
September	391,668	654,313	.....
October	329,187	456,480	.....
November	336,768	319,422	.....
December	407,532	546,964	.....
Totals	5,106,025	6,088,058	.....
Average	425,502	507,338	799,233

Wholesale Prices Current.

☞Our Quotations are those of Importers and Manufacturers, for original packages and large lots. For broken lots higher prices are asked.

Oils, Etc.

Vegetable Oils.

Linseed, city, raw, in bbls	℔ gal.	.38 @39
boiled, in bbls		.40 @41
out of town, on spot		.37 @38
Calcutta, raw, in bbls		.65 @—
Varnish oil, American		**@—**
Calcutta		**@—**
Cottonseed, crude, prime		**@—**
" " f. o. b. mills		.30 @33
Crude, off quality		**.25 @30**
Yellow summer, prime		.42½@43½
Yellow summer, butter		**.45 @46**
Yellow summer, off q'lity		.38 @39
White summer		.47 @48
Yellow winter		**.47 @49**
Winter, white		.48 @50
Soap stock	℔ lb.	1¼@1.30
Olive	℔ gal.	.52 @57
Olive soap stock	℔ lb.	5¾@ 6
Palm, red		5½@ 5⅝
Lagos		5½@ 5¾
Cocoanut, Ceylon		5¼@ 5½
Cochin		5¾@ 6
Corn		4.30@ 4½
Castor oil No. 3		**9½@11**
Mustard		.56 @57
Peanut, white	℔ lb.	@—
yellow		**5¾@—**
Rosin, first run	℔ gal.	**.13 @14**
second run		**.15 @16**
third run		**.17 @18**
fourth run		**.19 @20**
Rapeseed, in bbls., burning		.64 @65
blown		.59 @61
refined		.59 @61

Animal and Fish Oils.

Black fish, crude	℔ gal.	.35 @40
bleached, winter		.48 @49
Cod, domestic, prime		.37 @38
Newfoundland		.42 @43
Degras, French	℔ lb.	4 @ 5
English		2¾@ 3
German		2¼@ 2½
Herring	℔ gal.	.23 @24
Lard, prime		.66 @67
Extra No. 1		.52 @54
No. 1		.44 @45
No. 2		.43 @44
Menhaden, Northern, A		.26 @27
Southern		.25 @26
Brown, strained		.31 @32
Light, strained		.32 @33
Bleached, winter		.34 @35
Ex. bleached, winter, white		.36 @37
Neatsfoot, white		.68 @70
Prime		.57 @58
Dark		.50 @52
20 deg. cold test		1.00@1.01
30 deg. cold test		.88 @89
Red, Elaine		.45 @46
Saponified	℔ lb.	4¾@ 4⅞
Seal, bleached, refined	℔ gal.	.45 @46
Sod, American		.28 @29
English		**.28 @33**
Sperm, crude		**@—**
Natural, spring		.65 @67
Natural, winter		.69 @70
Bleached, spring		.67 @68
Bleached, winter		.71 @72
Tallow, prime		.52 @53
Acidless		.55 @56
Dark		.48 @49
Whale, crude		**@—**
Natural, winter		**.46 @47**
Natural, spring		**@—**
Bleached, spring		@—
Bleached, winter		**.48 @49**
Extra bleached, winter		**.50 @51**

Mineral Oils.

Black reduced, 29 gravity, 25@30 c. t.	**.13 @14**
29 gravity, 15 cold test	**.13½@14½**
27 gravity, zero	**.18 @19**
Summer	**.12½@13½**
Cylinder, light filtered	**.20½@21½**
Dark filtered	**.18½@19½**
Extra cold test	**.25 @32**
Dark steam refined	**.14½@16½**
Natural, Franklin, 32 gravity	**.12½@17½**
Smith's Ferry, 32@34 gravity	.10½@12
West Virginia, 29 gravity	.21½@23½
Neutral filtered lemon, 33@34 gravity	.17½@22
White, 33@34 gravity	.25 @27
32@34 gray, bloomless	.17 @22
32 gray, wool grade	.15 @17
Paraffine, high viscosity	.24 @27
903-907 sp. gr	.15 @15½
903 sp. gr	.14 @14½
883 sp. gr	.11¾@12
875 sp. gr	.11 @11½
865 sp. gr	.11 @11½
Red paraffine, No. 1	**.15 @15½**
Red paraffine, No. 2	**.14 @14½**
Spindle, No. 1, filtered	**.17½@18½**
No. 1	**.14½@15½**
No. 2	**.13½@14½**
No. 3	**.12½@13½**
No. 4	**.12 @12½**

Oil Cake, Meal, Etc.

Calcutta, cake, city	℔ ton.	**27.00@—**
City, domestic		23.50@24.00
Western, in bags		23.50@24.00
Cottonseed cake at Memphis		**—@—**
at New Orleans		—@—
at Boston		27.00@—
Cottonseed meal at Memphis		22.00@—
at New Orleans		—@—
Corn cake		24.00@—
meal		24.00@—

Wax, Lard, Tallow, Etc.

Paraffine, wax, crude	℔ lb.	4 @ 5
refined, 120 m. p		**5½@ 5¾**
125 m. p		**5¾@ 5¾**
130 m. p		**6¼@ 6¼**
135 m. p		**7½@ 7¾**
140 m. p		**12½@13**
Candles, adamantine, 6s., 16 oz		8½@ 9½
14 oz		8½@ 9½
paraffine, 4s. and 6s		9½@10½
12s. 16 oz		10½@11½
14 oz		.11 @12
12 oz		—@—
Candles, patent sperm, 4s. and 6s		.38 @40
sperm, 4s. and 6s		.33 @34
Stearic acid—		
plain, 4s., 6s. and 8s		.11 @12
patent ends, 4s. and 6s		11½@12½
cartons, 6 lbs. each		.12 @13
Lard, spot, tierces		8½@—
export, pkgs		8¾@—
compounds		7¼@ 7⅝
neutral		8¼@ 8½
Oleo, stearine		7¾@—
Lard, stearine		8¾@ 9
Tallow		4½@ 4⅞
Stearic acid		**.11 @11¼**

Naval Stores.

Spirits turpentine, spot	℔ gal.	51½@51¾
Rosin, strained	℔ bbl.	2.00 @2.02½
Good strained		2.02½@2.05
D		2.05 @2.10
E		2.10 @2.12
F		2.15 @2.20
G		2.25 @2.27
H		2.55 @2.60
I		3.10 @3.15
K		3.35 @3.40
M		3.50 @3.55
N		3.60 @3.65
Window Glass		3.75 @3.85
W. W		3.90 @3.95
Tar, ordinary		2.40 @2.45
oil, barrels		4.45 @4.50
Pitch		1.75 @1.80

Paints, Varnishes, Etc.

White Lead, Zincs, Etc.

White lead, American dry	℔ lb.	5¾@ 6
In oil		6¾@ 7
English in oil		7¼@ 9¾
Litharge, American, powdered		5½@ 6¾
English flake		8¼@ 8½
Glassmakers		6¾@ 8½
Red Lead, foreign		6¾@ 8½
American		6½@ 6¾
Orange mineral, American		8¼@ 8½
English		8¾@ 9¼
French		10¼@11¼
German		8¾@ 9¼
China white		9¼@ 9¾
Flake white		9¼@ 9¾
Cremnitz, white		.13 @17
Zinc white, Paris G. S., 50 bbls..9⅞ less		4 ℔ ct
G. S., 25 bbls..9⅞		2 ℔ ct
R. S., 10 bbls..8⅝		1 ℔ ct
R. S., 50 bbls..8⅝		4 ℔ ct
R. S., 25 bbls..8⅝		2 ℔ ct
R. S., 10 bbls..8⅝		1 ℔ ct
Antwerp R. S., 50 bbls..7⅝		4 ℔ ct
R. S., 25 bbls..7⅝		2 ℔ ct
R. S., 10 bbls..7⅝		1 ℔ ct
G. S., 50 bbls..8⅞		4 ℔ ct
G. S., 25 bbls..8⅞		2 ℔ ct
G. S., 10 bbls..8⅞		1 ℔ ct
G. S. in poppy oil		.12 @12½
R. S. in poppy oil		.10¾@11½
American, extra dry		4¾@ 4⅞
Florence, Green Seal		6¾@—
Florence, Red Seal		6 @—
German		6 @ 6¼

Dry Colors.

REDS.

Carmine, No. 40	℔ lb.	2.25 @2.50
Crocus martus, imported		2½@ 3½
standard American		1 @ 2½
Indian red, standard American		3 @ 3¼
English		4½@ 8½
Rose pink, American		8 @ 10½
English		8½ 10
Tuscan red, English		7 @ 10
Turkey red, English		4 @ 6
Venetian red, English, extra, ℔ 100 lbs		1.25 @1.75
prime		1.15 @1.75
American		**.50 @1.50**
Vermilion, imported English, ℔ lb.		.80 @ 85
American quicksilver, bulk		— @ 70
bags		— @ 71
Chinese		**1.05 @1.20**
American		**.10 @ 40**

BLACKS.

Bone	℔ lb.	2 @ 5
Carbon		.5 @10
High grade		**.15 @20**
Drop, American		4 @ 6
English		5 @15
Ivory		.16 @20
Lamp, commercial		4½@ 6
Refined		7 @15
Calcined		9 @20
fine spirit		**.30 @35**

BLUES.

Celestial	℔ lb.	4 @ 6
Chinese		.29 @32
Prussian		.27 @30
Italian		.10 @11
Prussian, foreign		**.32 @36**
Refiners'		**.60 @70**
Soluble		**.29 @33**
Ultramarine		3½@15
Verditer		**.35 @50**

BROWNS.

Sienna, Italian, burnt and powdered	℔ lb.	3 @ 6½
burnt lump		1¼@ 3
raw, powdered		3 @ 6½
raw, lump		1¼@ 3
American burnt and powd'd.		1½@ 2
raw		1½@ 2
Spanish brown		½@1
Umber, Turkey, burnt and powdered.		2½@ 3½
burnt lumps		3½@ 4
raw and powdered		2½@ 3½
raw, lumps		2½@ 3
American burnt		1½@ 2
raw		1½@ 2
Vandyke brown, German		2¼@ 3½
American		1¾@ 2½

GREENS.

Chrome, chemically pure, per lb		.17 @25
Extra		**.12 @15**
Super		**.8 @10**
Common		**.3½@ 6**
Paris, in bulk		11½@13
Verdigris, French, pods		**.21 @22**
C. p. pow'd		**.35 @38**

YELLOWS.

Chrome	℔ lb	11 @ 14
Ocher		1½@ 2
Dutch (washed)		5 @ 7
French do		5 @ 7
golden		3½@ 4½
domestic	℔ ton.	10.00 @18.00

MISCELLANEOUS.

Barytes, prime white	℔ ton.	17.00 @20.00
foreign floated		19.00 @21.00
domestic floated		18.50 @20.00
off color		14.00 @16.00
crude, No. 1		9.00 @10.00
No. 2		8.00 @ 8.25
No. 3		7.75 @ 8.00
Blanc fixe	℔ lb.	2½@ 2⅞
Bronze powder		55 @ 2.50
Brocades		55 @ 1.50
Chalk	℔ ton.	3.25 @ 3.50
Clay, China, imported		11.00 @17.00
Domestic		8.50 @10.00
Coal tar		3.50 @ 4.00
Cobalt, oxide	℔ lb.	2.50 @ 2.65
Feldspar	℔ ton.	10.00 @15.00
Fuller's earth, lump	℔ 100 lbs.	80 @ 1.00
powdered		80 @ 1.00
Lithopone		4 @ 5½
Marble flour	℔ ton.	7.00 @ 8.00
Manganese, car lots	℔ ton.	22.00 @60.00
jobbing	℔ lb.	3 @ 6
Magnesite, raw	℔ ton.	7.00 @ 8.00
calcined, pow'd	℔ lb.	1¾@ 2
Plaster	℔ bbl.	1.40 @ 1.75
dentists'		— @ 2.00
Pumice stone, orin'l cks	℔ lb.	1¾@ 2
selected lumps in bbls		4 @ 5
po'd pure, bbls.	℔ 100 lbs.	1¾@ 2
Putty, in bulk		1¼@ 2
12½ to 25-lb. tins		1½@ 2¼
1 to 5-lb. tins		2½@ 4¼
bladders		1¾@ 2½
Rottenstone, casks	℔ lb.	6 @ 7½
selected lumps		6 @ 20
powdered, in bbls		3 @ 4
Silex	℔ ton.	12.00 @18.00
Smalt, German blue	℔ lb.	6 @ 10
super, black		4 @ 7
Talc, American	℔ 100 lbs.	90 @ 1.10
French	℔ lb.	2 @ 2¼
Italian		2¼@ 4¾
Terra alba, American No. 1		65 @ 85
No. 2		45 @ 50
English		95 @ 1.00
French		95 @ 1.00
Whiting, commercial		48 @ 55
gilders'		62 @ 68
extra gilders'		66 @ 72
American, Paris		73 @ 78
English cliffstone		90 @ 1.10

GLUES.

Extra white	℔ lb.	18 @ 23
Medium white		14½@ 16½
Cabinet		11½@ 16
Low grade		9 @ 12
Foot stock, white		11 @ 13½
brown		7½@ 10
Common bone		6½@ 8
Irish		13¼@ 16
French		12 @ 40
German hides		12½@ 16
common		10 @ 12½

VARNISH GUMS.

Asphaltum, Barbadoes, per lb		2½@ 4
Cuban		1¾@ 3½
Egyptian		5¾@ 6½
Copal, Sierra Leone, cleaned		.60 @75
Zanzibar, pure white		.55 @60
thumb size		.35 @40
sorts		.44 @46
bean and pea		.25 @27
Manila, pale		.11 @17
dark hard		.12 @13
bright amber		.11 @13
standard sorts		8 @ 9
nubs, No. 1		5¼@ 6
No. 2		4½@ 4¾
chips, No. 1		4½@ 4¾
No. 2		4¼@ 4⅝
Damar, Batavia		.13 @14
Singapore		9 @10
Kauri, standard		.30 @32
No. 2		.22 @24
No. 3		16½@17
Chips		.16 @23
Dust		6 @10
B. 1		.20 @23
B. 2		.12 @14
Brown chips		6 @15
Brown dust		4 @ 5
Single cross		.33 @35
Double cross		.40 @45
Triple cross		.43 @48
Picture quality		.65 @75
Pale and fine selected		.50 @55
Sandarac		.16 @18

Window Glass.

AMERICAN WINDOW GLASS.

SINGLE.

Inches	AA	A	B
25	$33.00	$29.00	$27.00
34	39.00	32.00	30.00
40	39.50	33.00	31.00
50	51.00	43.00	38.00
54	55.00	46.00	40.00
60	59.00	49.50	43.00
70	68.00	57.00	48.00
80	72.00	63.50	55.50
84	76.00	69.50	60.00

DOUBLE.

Inches	AA	A	B
25	$52.00	$44.00	$37.00
34	56.00	47.50	45.50
40	63.00	49.50	48.00
50	67.00	57.50	55.00
54	69.50	61.50	56.00
60	71.00	63.00	57.50
70	76.00	71.00	65.50
80	82.00	74.00	68.00
84	83.50	75.50	69.50
90	88.00	80.00	74.00
94	90.00	82.00	75.50
100	107.00	96.00	89.50
105	114.00	105.00	96.00
110	127.00	117.50	109.00
115	143.00	131.00	121.50
120	168.00	153.50	144.00
125	181.50	167.00	157.50
130	195.00	180.00	171.00

An additional 10 per cent. will be charged for all glass more than 40 inches wide. All sizes over 52 inches in length, and not making more than 81 united inches, will be charged in the 84 united inches bracket. All glass 84 inches wide or wider, not making more than 116 united inches, will be charged in the 120 united inches bracket.

Discounts—Car lots, 90 & 20 & 2½ per cent. f. o. b. factory; 90 & 10 per cent. from jobbers' stock in less than carload lots.

Metallic Paints.

Brown	℔ ton.	19.00@21.00
Red		16 00@20 00

Colors in Oil.

Black coach Japan	℔ lb.	.20 @35
in oil		.14 @18
drop		.14 @15
lampblack		.12 @14
Blue, Chinese		.36 @40
Prussian		.32 @36
ultramarine		.13 @16
Brown, sienna, burnt		.12 @15
raw		.12 @15
Umber, burnt		.11 @14
raw		.11 @14
Vandyke, brown		.11 @14
Green, chrome		.10 @15
Paris		— @24
Red, Indian		.12 @14
Venetian		6 @ 8
Yellow, chrome		.16 @20
ocher, French		6 @ 8

Drugs.

Opium.

Opium, natural, cases	℔ lb	3.50 @ 3.55
as wanted		3.55 @ 3.60
powdered		4.10 @ 4.15

Morphine.

Morphine, bulk	℔ oz.	2.00 @ 2.10
oz. vials		2.05 @ 2.15
⅛ oz. vials, 2½ oz. bxs		2.35 @ 2.40

Codeine.

Codeine, pure, 10-oz. lots	℔ oz.	3.50 @ —
ozs		3.65 @ —
eighths		3.75 @ —

Sulphate, nitrate and muriate, 25c., and phosphate, 50c., per oz. less than pure.

Quinine.

Quinine, 100 oz. tins		.23 @ —
50 oz. tins		23½@ —
25 oz. tins		.24 @ —
5 oz. tins		.25 @ —
1 oz. tins		.28 @ —
German, outside		.22 @ .23
Java		.20 @ .21
Cinchonidia, bulk		.20 @ .21

Miscellaneous.

Acetanilid, in bbls	℔ lb.	20 @ 21
Acid, benzoic, true	℔ oz.	10 @ 10½
ex toluol	℔ lb.	32 @ 34
boracic, crystals, city		10¾@ 11½
powdered, city		11¼@ 11¾
carbolic, drums		13 @ 15
bottles		19 @ 22
citric, domestic		35 @ 35½
Sicilian		— @ —
pyrogallic, bulk		1.75 @ 1.80
salicylic		31 @ 34
Alcohol, 94%	℔ gal.	2.39 @ 2.40
ref. wood, 95%		— @ 65
97%		— @ 70
purified		1.20 @ 1.50
Aloin	℔ lb.	35 @ 40
Ambergris, black	℔ oz.	15.00 @20.00
gray		27.50 @30.00
Ammonia, carb. domestic	℔ lb.	7½@ 8¼
foreign		8¾@ 9¼
Antimony, needle		7 @ 8
Areca nuts		6 @ 7
Balm of Gilead buds		28 @ 32
Barium, chloride		1.67½@ 1.70
chlorate		— @ 28
nitrate		6 @ 6¼
Barbadoes tar, in bbls	℔ gal.	25 @ 30
Bayberry wax	℔ lb.	16 @ 18
Bay rum, bbls		1.85 @ 2.25
Beeswax, white, pure		40 @ 43
yellow		31½@ 34½
Bismuth, citrate		2.35 @ 2.40
subcarbonate		2.25 @ 2.30
subgallate		2.15 @ 2.20
subnitrate		2.00 @ 2.05
Blue pill		38 @ 40
Borax, in bbls		7½@ 7¾
in bags		7¼@ 7½
powdered		7½@ 8
Bromide, ammonium		40 @ 48
potassium		30 @ 38
sodium		35 @ 43
Bromine, bulk		40 @ 45
Burgundy pitch		2½@ 3
Caffeine		3.00 @ —
Calomel, American		86 @ 88
English		— @ 1.00
Cantharides, Chinese		38 @ 40
powdered		45 @ 47½
Russian		62 @ 65
powdered		— @ 64
Carnauba wax, Flor		21 @ 23
No. 1		18½@ 22
No. 2		17 @ 19
No. 3		15½@ 16½
Carbon, bisulphide		9 @ 10
Castor oil, city, bbls		9¾@ 11¾
cases		10¼@ 12¼
Castile soap, white, pure		10 @ 10¾
Marseilles		8 @ 9
green, pure		8 @ 10
ordinary		6 @ 6½
mottled, pure		6¾@ 8
ordinary		5¼@ 5½
Ceresin, yellow		13 @ 15
white		14 @ 17
Chlo. hydrate, crusts, 28-lb. jar.		— @ 88
crystals		— @ 90
100 lbs., 5c. less.		
Chloroform		45 @ 50
Civet		1.65 @ 2.00
Clover tops		5½@ 7
Cocaine, bulk	℔ oz.	4.00 @ 4.25
Cocoa butter, 12-lb. bxs	℔ lb.	31 @ 34
bulk		27 @ 27½
Codliver oil, Newf'land	℔ gal.	3.00 @ 3.25
Norwegian	℔ bbl.	120.00 @140.00
Colocynth apples, Spanish	℔ lb	27 @ 30
Trieste		30 @ 35

Cologne spirit, 190° ℔ proof gal.	1.31	@	1.33
Corrosive sublimate.....℔ lb.	77	@	79
Coumarin, refined	3.50	@	5.00
Creosote, beechwood	85	@	90
Cuttlefish, Trieste	16	@	17
Jewelers' small	52	@	54
Jewelers' large	55	@	60
Dragon's blood, mass	15	@	20
reeds	50	@	60
Epsom salt .....℔ 100 lbs.	85	@	1.35
Ergot, Russian .....℔ lb.	28	@	29
Spanish	28	@	29
Ether, 1880	60	@	62
washed	64	@	66
1890	66	@	68
Eucalyptol	1.15	@	1.25
Formaldehyde	14	@	16
Fusel oil, crude.....℔ gal.	82½	@	—
refined	1.00	@	1.10
Gelatine, silver.....℔ lb.	24½	@	35
gold	30	@	60
Glucose, 42°.....℔ 100 lbs.	—	@	1.95
Glycerine, C. P., bulk.....℔ lb.	14½	@	15¼
drums and bbls. added.			
C. P., cans	15½	@	16
Dynamite	13	@	13½
Grains of Paradise	12	@	15
Grape sugar, 10°.....℔ 100 lbs.	—	@	1.50
Guarana .....℔ lb.	80	@	85
Haarlem oil	—	@	1.80
Hypophosphite, lime	48	@	50
potash	48	@	50
soda	48	@	50
Iceland moss	5	@	6
Insect powder	14	@	26
Iodine, re-sublimed	2.70	@	2.75
Iodoform	3.00	@	3.05
Irish moss, ordinary	6½	@	8
bleached	9	@	10
Isinglass, Russian	4.00	@	4.10
American	75	@	85
Japanese	50	@	52
Japan wax	14	@	14¼
Kola nuts	9	@	10
Licorice, mass, Greek	10	@	12
Spanish	14	@	20
stick, domestic	16½	@	23½
foreign	25	@	28
Lithia, carb.	1.35	@	1.50
Lupulin	25	@	28
Lycopodium	52	@	54
Manna, large flake	55	@	60
small flake	40	@	45
sorts	38	@	40
Menthol	—	@	7.00
Myrbane oil	7½	@	8½
Musk, pods., Cab.....℔ oz.	6.00	@	8.00
Tonquin	10.00	@	16.00
grain, Cab	—	@	14.00
Canton, extra	—	@	1.00
Canton, good	15	@	17
Tonquin	15.00	@	21.00
Druggists'	14.00	@	14.50
Naphthaline, balls.....℔ lb.	2¼	@	2½
flakes	2¼	@	2½
Nitrate silver, crystals.....℔ oz.	34½	@	38
Nux vomica.....℔ lb.	2¾	@	3
Petrolatum, bbls., amber	3	@	3¼
pale yellow	4	@	4½
lily white	10	@	10½
snow white	12	@	14
Phosphorus	45	@	1.10
Pilocarpine .....℔ oz.	10.00	@	12.00
Poppy heads .....℔ lb.	12	@	20
Precipitated chalk	4½	@	5½
Precipitate, red	96	@	98
white	1.01	@	1.03
Potash, permanganate	9¼	@	10
cyanide, bulk	21	@	23
iodide, bulk	2.05	@	2.10
Quicksilver	63	@	65
Resorcin	1.35	@	1.50
Rochelle salt	20	@	20½
Salicine, bulk	3.75	@	3.85
Salol, bulk, 5 lbs. or over	—	@	1.20
1 lb. bots.	—	@	1.30
½ lb. bots.	—	@	1.35
¼ lb. bots.	—	@	1.45
In lots of 25 lbs., 5c. less; 100 lbs., 10c. less.			
Santonine, crystals, 25 lbs	—	@	6.95
less	—	@	7.00
powdered .....20c. per lb. advance			
Seidlitz mixture	16½	@	17
Sesame oil .....℔ gal.	67½	@	70
Soda, benzoate .....℔ lb.	33	@	35
salicylate	33	@	35
Spermaceti, block	22	@	22½
cakes	23	@	23½
St. John's bread	3	@	3½
Strontia, nitrate	8	@	8¼
Strychnine, crystals, bulk..℔ oz.	65	@	90
Sugar of milk, cob.....℔ lb.	17	@	18
powdered	14½	@	15½
Sulphur, roll	1.85	@	2.15
flour	1.95	@	2.20
Tamarinds .....℔ keg.	—	@	2.25
Thymol .....℔ lb.	1.80	@	1.90
Vanillin .....℔ oz.	55	@	1.00
Venice turpentine.....℔ lb.	17	@	18
Zinc, chloride, gran	15	@	20
sulphate	3	@	3¼

Balsams.

Copaiba, Central American.℔ lb.	35	@	38
Para	42½	@	45
solidifiable	45	@	47½
Fir, Canada .....℔ gal.	3.15	@	3.60
Oregon	65	@	70
Peru .....℔ lb.	97½	@	1.05
Tolu	25	@	27

Barks.

Angostura .....℔ lb.	40	@	—
Bayberry	10	@	12
Black haw, of root	9	@	10
of tree	6	@	9
Buckthorn	4½	@	5
Cascara sagrada	13	@	15
Cascarilla, quills	10	@	15
ordinary	7	@	7½
Canella alba	11	@	12
Cinchona—red, quills	20	@	25
broken	10	@	20
yellow, quills	22	@	30
broken	15	@	20
Condurango	12	@	15
Coto	—	@	—
Cramp	5	@	6
Dogwood, Jamaica	5½	@	6½
Elm	25	@	30
Mersereon	8	@	10
Oak, red	2	@	4
white	3	@	—
Orange peel, bitter, Curacao, ¼s.	2¾	@	3
sweet, Malaga, pieces	7	@	10
quarters	9½	@	10
sweet, Trieste	4¾	@	5¼
Prickly ash	20	@	25
Pomegranate, of fruit	7	@	9
of root	—	@	15
Quebracho	10	@	10½
Sassafras	6½	@	8
Simaruba	—	@	50
Soap, whole	5¼	@	6
cut	6¼	@	7
Wahoo, of root	18	@	20
of tree	7½	@	8
White pine	—	@	4
White poplar	3½	@	4
Wild cherry	4	@	7½
Witch hazel	3½	@	4

Beans.

Calabar .....℔ lb.	14	@	20
St. Ignatius	12	@	16
Tonka, Angostura	60	@	65
Para	17½	@	22½
Surinam	30	@	35
Vanilla, Mexican whole	6.00	@	13.00
cuts	4.00	@	5.50
Bourbon	2.00	@	7.50
Tahiti	60	@	70
Vanillons	—	@	—

Berries.

Cubeb, whole.....℔ lb.	7½	@	8
powdered	11	@	13
Fish (Cocculus Indicus)	3	@	3½
Juniper	3	@	3¼
Laurel	4½	@	5
Prickly ash	14	@	15
Saw palmetto	28	@	30

Essential Oils.

Almond, bitter.....℔ lb.	3.50	@	5.75
artificial	75	@	1.50
sweet, true	40	@	50
peach-kernel	16	@	24
Amber, crude	10	@	15
rectified	18	@	22
Anise	1.05	@	1.15
Bay	2.00	@	2.75
Bergamot	2.05	@	2.20
Birch tar, crude	12	@	15
extra	20	@	25
Cade	15	@	17
Cajeput	53	@	60
Camphor	8	@	10
Caraway seed	1.10	@	1.35
Cassia, 75@80%	72½	@	75
Cedar, leaf	50	@	55
wood	21	@	23
Cinnamon, Ceylon, heavy	7.50	@	16.00
Citronella	20	@	22
Cloves, cans	60	@	62
bottles	62½	@	65
Copaiba	75	@	85
Coriander	5.50	@	11.00
Croton	90	@	1.10
Cubeb	85	@	90
Cummin	2.25	@	2.35
Erigeron	55	@	80
Eucalyptus, American	34	@	45
Australian	35	@	60
Fennel seed, sweet	60	@	1.25
bitter	45	@	1.00
Geranium, rose, African	5.00	@	6.00
Turkish	2.25	@	4.50
French	7.50	@	12.00
Ginger	4.00	@	6.50
Gingergrass	1.10	@	1.35
Hemlock	50	@	55
Juniper berries	50	@	1.00
wood	17½	@	30
Lavender, cultivated	—	@	2.00
flowers	1.55	@	1.60
aspic pure	—	@	90
spike	—	@	90
garden	35	@	50
Lemon	60	@	80
Lemongrass	1.80	@	1.90
Limes, expressed	1.50	@	1.60
distilled	55	@	95
Linaloe	2.00	@	2.25
Mace, distilled	1.00	@	1.10
expressed	65	@	70
Malefern	2.00	@	2.20
Mustard, natural	4.50	@	5.50
artificial	2.00	@	3.00
Neroli, petale	32.50	@	40.00
bigarade	26.00	@	35.00
Nutmeg	80	@	90
Orange, bitter	1.55	@	2.00
sweet	1.65	@	1.75
Organum	18	@	22
Patchouli, leaf	5.50	@	5.75
cultivated	—	@	6.00
Pennyroyal	1.15	@	1.25
Peppermint, tins	2.00	@	2.80
bottles	2.85	@	3.00
Petit grains, French	4.00	@	6.00
South America	1.70	@	2.00
Pimento	1.40	@	2.00
Rhodium	1.50	@	13.50
Rose .....℔ oz.	4.00	@	4.60
Rosemary flowers, French..℔ lb.	62½	@	80
Trieste	42½	@	50
Sandalwood, East India	3.25	@	3.50
West India	1.50	@	2.00
Australia	2.75	@	3.00
Sassafras, natural	40	@	45
artificial	27	@	31
Safrol	34	@	36
Savine	65	@	1.50
Spearmint	3.00	@	3.75
Spruce	45	@	50
Tansy	3.00	@	4.00
Thyme, red, French	90	@	1.00
white, French	95	@	1.10
Wintergreen, nat'l (sweet birch)	1.75	@	1.90
synthetic	38	@	42
leaf	2.00	@	2.50
Wormseed, Baltimore	1.35	@	1.50
Wormwood, pure	4.00	@	4.25
Ylang ylang	40.00	@	70.00

Flowers.

Arnica .....℔ lb.	8½	@	9
Calendula	19	@	22
Chamomile, Roman	12	@	16
German, true	13	@	23
Hungarian	10	@	12
Elder	10	@	11
Insect	15	@	26
Lavender, ordinary	5½	@	—
select	7	@	9
Mullein	65	@	—
Poppy, red	—	@	35
Rosemary	15	@	16
Saffron, American	28	@	30
Alicante	4.50	@	5.00
Valencia	7.25	@	7.50

Gums.

Aloes, Curacao, in boxes..per lb.	3	@	4
Cape	—	@	14
Socotrine	18	@	20
Ammoniac	20	@	—
Arabics, firsts	30	@	35
seconds	20	@	23
thirds	16	@	19
fourths	13	@	14
sorts	7	@	10
Asafoetida	19	@	28
Benzoin, Siam	40	@	1.10
Sumatra	26	@	34
Camphor, American, barrels	—	@	55½
cases	—	@	56
Chicle	45	@	50
Euphorbium	—	@	15
Galbanum	70	@	75
Gamboge, pipe	85	@	90
Guaiac	22	@	30
Kino	22	@	25
Mastic	33	@	35
Myrrh	20	@	33
Olibanum, siftings	4	@	4½
sorts	6	@	7
tears	9	@	10
Sandarac	13	@	17
Scammony, rosin	—	@	2.25
Aleppo	2.75	@	2.90
Virgin	4.00	@	6.50
Senegal, picked	11	@	20
sorts	7½	@	9
Spruce	1.25	@	1.75
Tragacanth, Aleppo, firsts	60	@	65
seconds	50	@	55
thirds	38	@	43
fourths	27	@	35
Turkey, firsts	75	@	90
seconds	48	@	57
thirds	36	@	41

Herbs and Leaves.

Aconite .....℔ lb.	8	@	9
Althea	10	@	12
Bay	14	@	15
Belladonna	10	@	13
Buchu, short	23	@	25
long	75	@	80
Cannabis Indica, tops	90	@	1.00
siftings	—	@	—
Coca, Huanoco	28	@	30
Truxillo	17½	@	19
Coltsfoot	7	@	9
Conium	7	@	8
Deer tongue	4	@	5
Damiana	10	@	12
Digitalis	8	@	10
Eucalyptus	3½	@	5
Grindelia robusta	6½	@	8
Henbane	6	@	7½
Horehound	4¾	@	5
Jaborandi	12	@	14
Laurel	3	@	3½
Lobelia	7½	@	9
Matico	—	@	16
Marjoram, German	21	@	22
French	13	@	15
Pennyroyal	—	@	8½
Peppermint, American	—	@	10
German	25	@	30
Pichi	13	@	16
Pulsatilla	9	@	10
Prince's pine	—	@	8
Rose, red	75	@	80
Rosemary	3½	@	4
Rue	13	@	16
Sage, Italian, picked	3½	@	4½
Savory	5	@	6
Scull cap	12	@	14
Senna, Alex, whole leaf	21	@	25
half leaf	12	@	20
siftings	6	@	7
Tinnevelly	5	@	14
Stramonium	5½	@	6
Thyme	3½	@	3¾
Uva ursi	3½	@	5
Witch hazel	4	@	5
Wormwood, foreign	6½	@	7
Yerba santa	8	@	12

Roots.

Aconite, German .....℔ lb.	10	@	12
Alkanet	5¾	@	6
Althea, whole	12	@	13
cut	19	@	20
Angelica, German	12	@	14
American	—	@	15
Arnica	8½	@	9
Arrowroot, Bermuda	35	@	40
St. Vincent, bbls	7½	@	8
Belladonna, Atropa	9½	@	11
Berberis aquifolium	10	@	12
Bitter	13	@	15
Blood	8	@	9
Blueflag	—	@	8
Byronia	8	@	9
Burdock	5	@	6
Calamus, bleached	30	@	36
unbleached	7	@	12
Cohosh, black	3½	@	4½
blue	—	@	5
Colchicum	9	@	10
Colombo	4½	@	8
Culvers	7	@	9
Dandelion, German	7½	@	7¾
Doggrass	5¾	@	6¼
Galangal	6	@	6¾
Gelsemium	5	@	5½
Gentian	4¾	@	5
Ginseng, Southern	3.75	@	4.00
Northwestern	5.00	@	5.75
Eastern	5.00	@	5.75
Ginger, Jamaica, unbleached	8½	@	10
bleached	11	@	13
Golden seal	53	@	56
Hellebore, white	5	@	5½
black	4½	@	5
powdered	6	@	7
Hydrangea	4½	@	5
Ipecac, Rio	1.35	@	1.40
Cartagena	1.15	@	1.20
Jalap	9½	@	10½
Kava kava	12	@	12½
Lady slipper	18	@	20
Licorice, in bales	3½	@	4
selected, bundles	7	@	10
Lovage, American	75	@	85
German	12	@	16
Mandrake	4¾	@	5¼
Musk, Russian	12½	@	13
Orris, Florentine, bold	8	@	9
small	6	@	7
Verona	4	@	5
fingers	60	@	65
Pareira brava	11	@	12
Pellitory	12	@	13
Pink	18½	@	20
Pleurisy	10	@	12
Poke	4½	@	5
Rhatany	11	@	12
Rhubarb, Canton	35	@	40
Shensi	65	@	70
high dried	12½	@	20
clippings	12½	@	47½
Sarsaparilla, Honduras	24	@	26
Mexican	8½	@	9
Senega, Southern	63	@	70
Western	60	@	65
Serpentaria	40	@	42
Skunk cabbage	7½	@	10
Snake, Canada	14	@	20
Virginia	—	@	45
Squaw vine	7	@	8
Stillingia	5	@	6
Stone	5	@	6
Squills	3½	@	4
Unicorn, false	28	@	30
true	—	@	20
Valerian, German	15	@	16
Belgian	4¾	@	5
English	18	@	20
Wild yam	5	@	6
Yellow dock	—	@	8
Zedoary	9	@	10

Seeds.

Anise, Italian, sifted.....℔ lb.	9	@	10
German	4½	@	5
Spanish	9	@	10
star	14½	@	17
Canary, Sicily	3¾	@	4
Smyrna	3½	@	3⅝
Caraway, Dutch	5	@	5¼
Cardamoms, bleached	35	@	60
decorticated	37½	@	40
Celery	9	@	9½
Colchicum	—	@	50
Conium	7	@	7¼
Coriander, natural	2½	@	2¾
bleached	2¾	@	3
Cummin, Malta	7	@	7¼
Fennel, German	10	@	10½
Italian	5¼	@	5½
Flax, per bbl	6.50	@	6.75
ground, per lb	3½	@	4
Fenugreek	1¾	@	2
Hemp, Russian	2¾	@	2¼
Larkspur	38	@	45
Lobelia	42	@	45
Millet	1¾	@	1¾
Mustard, brown, Bari	4½	@	5
California	4¼	@	4½
German	—	@	3½
Sicily	4½	@	5
Trieste	7½	@	8
yellow, California	4¼	@	4¼
English	5	@	5½
German	3¼	@	3½
Poppy	5¾	@	5¾
Pumpkin	12	@	—
Quince	35	@	40
Rape, English	4	@	5
German	2¾	@	3
domestic	2¾	@	3
Sabadilla	14	@	16
Stavesacre	9	@	10
Stramonium	—	@	9
Strophanthus, Kombe	1.10	@	1.25
Hispidus	42	@	45
Sunflower	2	@	2¼
Worm, Levant	14	@	15
American	15	@	16

Shellac.

D. C.....℔ lb.	48	@	50
Diamond I	43	@	44
V. S. O	—	@	46
T. N	32	@	33
A. C. Garnet	28	@	30
Button	35	@	45
Bleached	—	@	30

Spices.

Cassia, Batavia, No. 1.....℔ lb.	18	@	19
Batavia, No. 2	13	@	14
Canton mats	8	@	8½
broken	2½	@	8¼
Saigon, rolls	45	@	46
broken	31½	@	33
buds	19	@	19½
Cloves, Amboyna	13	@	14
Zanzibar	8½	@	8⅝
stems	3½	@	4
Ginger, Calcutta	7	@	7¼
Cochin	7¾	@	9½
African, No. 1	7	@	7¼
Mace, Banda, No. 1	58	@	60
Batavia, No. 2	50	@	51
Penang, No. 2	53	@	54
Nutmegs, 105's to 110's	28	@	30
Pepper, black, Acheen	12½	@	12¾
Lampong	12½	@	12⅝
Singapore	13	@	13¼
Tellicherry	12¾	@	13
white, Penang	19¾	@	20
Singapore	20½	@	21
red, Japan	13	@	13½
Zanzibar	13	@	13½
Pimento, No. 1	5	@	5¼
grinding	4¾	@	4¾

Chemicals.

Heavy Chemicals.

Alkali, 48 per cent., Solvay, ℔ 100 lbs.	90	@	95
ammonia, high test	77½	@	90
Bleach, over 35 per cent	1.00	@	1.35
Salt cake	82½	@	85
Soda ash, carb, 48 per cent	—	@	—
high test	90	@	95
caustic, 48 per cent	—	@	—
Newcastle, 48 per cent	—	@	—
high test	—	@	—
Soda, bicarb, English	1.60	@	1.70
American	1.35	@	3.50
Soda, caustic, domestic, ℔ 100 lbs.			
60 per cent	1.80	@	1.85
70 per cent	1.70	@	1.75
74 per cent	1.70	@	1.75
78 per cent	1.70	@	1.75
foreign, 60 per cent	—	@	—
70 per cent	—	@	—
74 per cent	—	@	—
78 per cent	1.80	@	2.00

Soda, caustic, powdered, granulated.			
60 per cent..₱ 100 lbs.	2.60	@	3.00
70 per cent.	2.87½	@	3.25
Sal, English	67½	@	72½
American	60	@	70

Acids.

Acid, acetic..₱ 100 lbs.	1.80	@	4.25
chemically pure..₱ lb.	20	@	21
oxalic	5¼	@	5¾
pyroligneous	9	@	10
sulphuric, 60 deg..₱ 100 lbs	1.20	@	1.30
66 deg.	1.30	@	1.40
bulk 50 deg.	14.00	@	15.00
muriatic, 18 deg.	1.50	@	1.60
20 deg.	1.60	@	1.70
22 deg.	1.75	@	2.00
aqua fortis, 36 deg..₱ lb.	4½	@	4¾
38 deg.	4½	@	5
40 deg.	4¾	@	5¼
42 deg.	5¼	@	5½
nitric, 36 deg.	4¾	@	4¾
38 deg.	4¾	@	4¼
40 deg.	5	@	5½
42 deg.	5¾	@	6
tartaric crystals.	31¼	@	31½
powdered.	31½	@	31¾

Miscellaneous Chemicals.

Acetate of lime, gray..₱ 110 lbs.	1.40	@	1.45
brown	95	@	1.00
Alum, lump ..₱ 100 lbs.	1.75	@	1.85
ground	1.85	@	1.95
porous	95	@	1.45
Argols, plates ..₱ lb.	—	@	—
red	—	@	—
Arsenic, white	2¾	@	3¼
red	6¾	@	7
Brimstone, crude, 2ds..₱ ton.	22.25	@	22.50
3ds.	21.00	@	—
Cream tartar, crystals, p. c.₱ lb.	24½	@	24½
powdered, 90 p. c..	25	@	—
Chlorate of soda	7¼	@	7½
Chloride of calcium, 75 p. c.	68	@	78
Copperas	52½	@	75
Glauber salts	80	@	85
Nitrate of lead	6½	@	6¾
Nitrate of soda	2.00	@	2.05
Sugar of lead, brown	6¾	@	7
white	8¾	@	8¾
Saltpeter, crude	3.40	@	3.50
refined	4¼	@	5¼
Sulphate, alumina	1¾	@	1½
Vitriol, blue	4¾	@	5¼

Ammoniates, Potashes, Etc.

AMMONIATES.

Aq. am'ia (in dms) 16 deg..₱ lb.	3¼	@	3½
18 deg.	3½	@	3¾
20 deg.	4	@	4¼
26 deg.	5¾	@	6
Ammoniac, sal, gray	5¾	@	6¼
granulated	5¾	@	6¼
lump	9¼	@	9¾
Ammonia sulphate	3½	@	3.15
Nitrate of soda	2.00	@	2.05
Blood, dried, red..₱ unit.	2.55	@	2.60
low grade	—	@	—
Concentrated tankage..₱ ton.	15.00	@	16.00
Fish, guano, dried	24.50	@	25.00
acidulated	22.00	@	23.50

PHOSPHATES.

Acid phosphate	60	@	67½
Phosphate rock, f. o. b. Char'n.	5.00	@	7.00
Tenn..	3.00	@	4.00
Bones, rough..₱ ton.	16.50	@	17.50
ground	19.00	@	20.00
Bone meal	19.00	@	—
Bone black, refuse	18.00	@	19.00

POTASHES.

Ashes, pot, 1st sorts..₱ lb.	4¾	@	5
pearl	5¾	@	6½
Potash, chlorate	7	@	7¼
powdered	7¼	@	7½
carb	3½	@	4½
caustic	5	@	6
dbl. m're salt..48@53%	1.12	@	1.15
dbl. m'ure salt..48@53%			
less than 25 tons.	25.00	@	30.00
sulph. of..basis 90@98%	2.11	@	2.18
90@98% less than 25 tns	38.00	@	40.00
Potash, Muriate..₱ 100 lbs.	1.83	@	1.95
less than 25 tons.	36.00	@	40.00
Kainit, 25% S. of P..₱ ton.	9.30	@	9.50
less than 25 tons.	9.50	@	10.50
Sylvinit, 35@37% P..₱ unit.	41	@	46

Dyestuffs.

Acetate of soda..₱ lb.	4	@	4½
Acid, gallic	41½	@	47
picric, best crystals	26	@	35
tannic, commercial	30	@	35
crystals	55	@	60
Albumen, egg	45	@	70
blood	13½	@	17
Alizarine, red	15½	@	16½
assistant	23	@	30
Aniline oil	8¾	@	9
salt, crystals	8½	@	9
Annatto	9	@	14
fine	25	@	—
seed	—	@	5
Antimony, oxymuriate	4	@	6
salt, 65%	16	@	17
47%	13	@	15
Bichloride of tin, 50°	9¼	@	9½
60°	12½	@	13
Bichromate of potash, American	8¼	@	8½
Bichromate of soda	6¼	@	6½
Bisulphate of soda	1¼	@	2¼
Carmine of indigo	60	@	75
Cochineal, Teneriffe, silver	24½	@	25
black	26	@	28
gray black	29	@	32
Cudbear, French	12	@	18
concentrated	23	@	25
English	10	@	18
Cutch, mat	5	@	5½
refined	5½	@	6
refined, in boxes	6	@	6½
slabs, in boxes	9	@	10
Dextrine, imported	5¼	@	8
corn	3¾	@	4
Divi-divi..₱ ton.	45.00	@	50.00
Flavine..₱ lb.	23	@	42
Fustick, stick..₱ ton.	15.00	@	20.00
young root	31.00	@	35.00
Gambier..₱ lb.	5¾	@	6½
cube No. 1	9½	@	10
cube No. 2	8	@	9
Garacine	6	@	8
Hypo. of soda, Am., cks—₱ cwt.	1.60	@	1.65
kgs	1.70	@	1.95
German, cks	1.70	@	2.00
kgs	1 90	@	2.30
Indigo, Bengal, low grade—₱ lb.	70	@	75
medium	75	@	85
high grade	90	@	1.10
Kurpahs, medium to good.,	55	@	60
higher grade	65	@	75
Guatemala	55	@	75
Manila	48	@	55
Madras	—	@	—
J. (synthetic)	25	@	—
Indigotine	95	@	1.80
Logwood, stick..₱ ton.	15.00	@	22.00
roots	16.00	@	17.50
Madder, Dutch..₱ lb.	8	@	10
French	6	@	7½
Myrabolams	2¾	@	2½
Muriate of tin, 32°	—	@	9
52°	—	@	15
Nitrate of iron, commercial	1¼	@	1¾
true	4	@	4¾
Nutgalls, blue Aleppo	12½	@	12¾
Chinese	13	@	13½
Persian berries	6	@	6½
Prussiate of potash, yellow	14	@	14¼
red	37	@	38
Prussiate of soda	9¾	@	9¾
Phosphate of soda	2½	@	2¾
Quercitron..₱ ton.	18.00	@	21.00
Sago flour..₱ lb.	1¾	@	2¼
Salts of tartar	5½	@	7
Silicate soda	1	@	1½
Soluble oil, 50%	6½	@	7
75%	11	@	12
Starch, corn, pearl, in bbls	2.35	@	2.37
in bags	2¼	@	2.27
potato	3½	@	5½
rice	7	@	9
wheat	5¼	@	6
Stannate of soda, 50%	20	@	28
Sumac, Sicily, No. 1..₱ ton.	47 00	@	50.00
No. 2.	45.00	@	48.00
Virginia	33.00	@	34.00
Tapioca flour..₱ lb.	2¼	@	3
Tartar emetic	21	@	22
Tin crystals	23	@	24½
Turmeric, Bengal	7	@	7¾
Aleppo	7¼	@	8
Chinese	7	@	7½
Cornings	6½	@	7
Turkey red oil	6	@	9
Vanadiate ammonium..₱ oz.	—	@	90
Zinc dust..₱ lb.	4¾	@	5

Chipped Dyewoods, Etc.

Barwood ..₱ lb.	2	@	2¼
Camwood	6	@	8
Fustic	1¾	@	2
Hypernic	3	@	3¼
Logwood, Campeche	1¼	@	1¾
Red sanders	2¾	@	3

Extracts.

Archil, double..₱ lb.	8	@	13
concentrated	9	@	15
Barberry, French	22	@	28
Chestnut	2½	@	3
Oak	3½	@	4
Hemlock	2½	@	2¾
Fustic, solid	9	@	11
liquid, 51°	7	@	10
Gall	13	@	15
Indigo	7	@	20
Logwood, solid	6½	@	12
liquid, 51°	5	@	10
42°	4	@	6
crystals	15	@	25
Quebracho, solid	3¼	@	3½
51°	2¼	@	2½
42°	2¾	@	3
Persian berry	8½	@	12
Sumac	2¾	@	7

Comparative Prices.

On July 20, 1900, 1901 and 1902.

Chemicals.	1902.	1901.	1900.
Bleaching powder	$1.60	$1.80	$1.60
Brimstone, 3ds	20.00	20.25	20.00
Caustic soda, 70 p. c.	**1.90**	**1.90**	**1.85**
Caustic soda, 60 p. c.	1.95	1.95	2.25
Sal soda, Am	.65	.55	.70
Soda, ash, 48 p. c. carb	—	—	1.20
Soda, ash, 48 p. c. c'st'c	**—**	**—**	**—**
Soda, alkali, 48 p. c.	.92½	.90	.90
Soda, nitrate	1.97½	1.85	1.75
Cream tartar, crystal	.21¼	.19½	.23
Muriate of potash	**1.80**	**1.83**	**1.83**
Chlorate of potash	.07¾	.08¼	.09¼
Kainit	**9.05**	**9.05**	**9.05**
Paints.			
White lead in oil	.05½	.05¾	.06
Litharge, Am., pow'd	.04¾	.05½	.06
Paris green	.12½	.12½	.12½
Orange, mineral	**.07¾**	**.08**	**.08¼**
Ven. red, English	**1.80**	**1.80**	**1.80**
Ven. red, American	**.50**	**.80**	**.80**
Barytes	**17.00**	**17.00**	**17.00**
Whiting, commercial	**.40**	**.40**	**.42**
Drugs.			
Opium	2.75	3.22½	3.30
Morphine, domestic	1.90	1.80	1.90
Quinine	—	.34	.35
Alcohol	2.43	2.45	2.37
Borax, city	**.07½**	**.07½**	**.07½**
Beans, tonka (Ang.)	**.70**	**.75**	**.70**
Cubeb, XX	.09½	.14	.12
Cuttlefish	.20	.21	.23
Glycerine, C. P., drums	**.14½**	**.14½**	**.14½**
Oil, castor, city	.10¾	.12	.12½
Oil, Cassia	.60	.70	.90
Oil, codliver, Nor	38.00	20.50	22.50
Oil, peppermint, tins	1.85	1.25	.80
Oil, sassafras	.39	.38	.35
Quicksilver	.64½	.66½	.67½
Asafoetida	.16	.27	.18
Gum arabic, sorts	**.08½**	**.12½**	**.14¼**
Camphor, bbls	**—**	**.60¼**	**.59¼**
Shellac, D. C	.35	.27	.26
Senna, Alex. Nat'l	**.21**	**.23**	**.23**
Senaga root	.55	.53	—
Ipecac	2.40	2.85	3.00
Jalap	.09½	.12	.12
Canary seed, Smyrna	.03¾	.02¼	.02 3-16
Caraway seed, Dutch	.05¼	.06	.06¾
Mustard seed, Cal., yel.	.04½	.06	.05½
Rapeseed, German	.03½	.03¼	.02¾
Oils.			
Cottonseed, prime, S. Y.	.43½	.38	.36½
Olive, Sicily	.53	.62½	.57
Cocoanut, Ceylon	.07½	.06¾	.05¾
Lard, prime, city	.85	.69	.56
Linseed, domestic	.67	.82	.67
Menhaden, prime, cde	—	.24	.25
Whale, bl'ched, winter	.48	—	—
Sperm, bl'ched, winter	**.78**	**.64**	**.62**
Oil cake, Western	27.00	30.00	28.25
Spirits, turpentine	.46½	.36½	.46½
Dyestuffs.			
Bichromate potash, Am.	.08¼	—	.09
Cochineal, Teneriffe, S.	**.16**	**.16**	**.22**
Cutch, bag	.04	.04¼	.04½
Gambier	.06¼	.05	.03¾
Indigo, Bengal, h. gde.	.85	.85	.95
Prussiate potash, yel	.14	.13½	.18¾
Starch, corn	2.82	1.93	1.75
Sumac, Sicily, prime	44.00	51.00	55.00

TIDE WATER OIL COMPANY

MANUFACTURERS OF

PARAFFINE OILS, CYLINDER STOCKS, BLACK OILS and ICE MACHINE OILS;
a low cold test Paraffine Oil, specially adapted for use in *REFRIGERATING MACHINES.*

ALSO

Refined Paraffine Wax of a Superior Quality

Our wax is strictly neutral, perfectly pure, free from taste and odor, is acid proof and water proof, and is the best Paraffine Wax manufactured, **ONE POUND CAKES A SPECIALTY.**

NEW YORK: 12 Broadway. BOSTON: 74 Broad Street.

CROWN ACME OIL

THIS JUSTLY CELEBRATED BRAND OF ILLUMINATING OIL OF

HIGH FIRE TEST, PERFECTION AS AN ILLUMINATOR, UNIFORMITY IN QUALITY.

Can be secured of any station of STANDARD OIL CO. in New York by addressing that Company at Buffalo, Syracuse, Pottsdam, Elmira, Corning and Jamestown, Binghampton, Sidney, and Utica, N. Y.

MACHINERY MANUFACTURERS

WOULD FIND IT TO THEIR ADVANTAGE TO

Advertise in these Columns

MACHINERY OF ALL KINDS is used in the manufacture of OILS, PAINTS, DRUGS, CHEMICALS, DYESTUFFS, Etc. We will bring you in direct contact with the largest manufacturers in these lines.

OIL, PAINT AND DRUG REPORTER,
100 WILLIAM STREET, NEW YORK.

STANDARD OIL CO. OF NEW YORK

MAIDEN LANE BRANCH

Refiners and Packers of Petroleum and its Products.

Office, 124 Maiden Lane, New York. Works, First and Bond Sts., South Brooklyn.

Standard Oil Company of Kentucky.

DEALERS IN Spirits Turpentine, Refined and Lubricating Oil, Axle and Railroad Greases.

OUR SPECIALTIES: RED CROWN STOVE GASOLINE, FIREPROOF OIL, MICA AXLE GREASE. Agencies and Depots at all the Principal Points in the South.

Main Office, LOUISVILLE, KY.

STANDARD OIL COMPANY OF NEW YORK.

Devoe Works, 26 Broadway, New York City, U. S. A

SOLE PROPRIETORS OF THE CELEBRATED BRANDS OF ILLUMINATING OILS:

DEVOE'S

BRILLIANT, PHOTOLITE } 110° test

NONPAREIL, GOLD SEAL } 150° test

PACKED IN PATENT CANS FOR EXPORT TO ALL COUNTRIES.

STANDARD OIL COMPANY, GENERAL OFFICES: CINCINNATI, OHIO.

Dealers in ENGINE and PERFECTION Water White OILS. FINE ENGINE and CYLINDER OILS.

CANDLES, AXLE GREASE, TURPENTINE, LINSEED OILS.

Standard Oil Company of New York. ACME WORKS.

MANUFACTURERS OF CROWN ACME OIL

Prepared with great care for family use, absolutely safe, and the best illuminator in the world,

Works at Olean, N. Y. Main Office, 26 BROADWAY, N. Y.

ATLANTIC REFINING CO. OFFICE: 125 ARCH STREET, PHILADELPHIA.

SELL STOVE NAPHTHA FOR

Vapor Stoves

There are two extremes obtained by the use of a VAPOR STOVE, namely the best results at the lowest fuel cost. It will cook anything on the most elaborately prepared menu at a fuel cost of

One-half cent per hour.

It will do this in a quick and clean manner and without heating your kitchen five degrees during the day.

PRATT'S PATENT PREPARED GASOLENE

Adapted to all kinds of Gas Machines 86°, 88° and 90° Gravities

PRATT'S DEODORIZED STOVE GASOLENE

For use in Vapor Stoves. Made in accordance with the recommendation of the Vapor Stove Manufacturers and guaranteed not to smoke, smell or gum the burner.

REDISTILLED NAPHTHAS

Also Fuel Oil, Lima Crude, Distillates, &c., prepared especially for Gas Companies, and obtainable either in barrel or tank car.

BOULEVARD GAS FLUID

For use in Vapor Street Lamps, Plumbers' Torches &c.

DOUBLE-DISTILLED DEODORIZED BENZINE AND NAPHTHA

of all grades and gravities from 62° to 76° for manufacturing varnishes and mixed paints, rubber and gossamer goods, floor and table oil cloths, as well as for general use of druggists, dyers, cleaners, etc., etc. The above goods can be had in quantities to suit the purchaser, everwhere in the East, either through our agents or from us direct.

STANDARD OIL CO., PRATT WORKS,

Proprietors "PRATT'S ASTRAL OIL." 26 BROADWAY, NEW YORK.

VACUUM LEATHER OIL.

JOBBERS HANDLE IT BECAUSE

It is Easy to Sell. It is Advertised Best. It is right for its Purpose.

It Gives Perfect Satisfaction.

Put up in taking cans, attractively enamelled. Handy Patent Lambskin-with-wool-on-swob goes with each can and book "How to Take Care of Leather." Liberal Trade Discounts.

FOR PARTICULARS APPLY TO

Vacuum Oil Co., Rochester, N. Y., or Any Branch.

Vice-President,
I. F. STONE, New York.
Secretary,
CHARLES WARE. Chicago.

President,
JACOB F. SCHOELLKOPF, Jr. } Buffalo.
Treasurer,
C. P. HUGO SCHOELLKOPF.

Vice-Presidents,
W. W. HANNA, Boston;
JESSE W. STARR, 3d, Phila.

SCHOELLKOPF, HARTFORD & HANNA CO.

OFFICES AND WAREHOUSES:

100 William Street, NEW YORK.
109 North Water Street, PHILADELPHIA.
163-165 Oliver Street, BOSTON.
108 Michigan Street, CHICAGO.
105 Reed Street, MILWAUKEE.
28 North Main Street, PROVIDENCE.
413 West 5th Street, KANSAS CITY.
215 Walnut Street, CINCINNATI.

Also Agencies at WATERTOWN and NEENAH.

Manufacturers of Aniline Colors, Coal Tar Products, etc.

DEALERS IN

Chemicals, Drugs and Dyestuffs

WE MENTION A FEW, BUT COMPLETE PRICE LISTS CAN BE HAD ON APPLICATION.

ACETONE, Pure.
ACID BENZOIC.
ACID CARBOLIC.
ACID CRESYLIC.
ACID OXALIC.
ACID PHOSPHORIC.
ACID PICRIC.
ACID SALICYLIC.
AMMONIA, Carbonate and Muriate.
AMYL ACETATE, Pure
ANILINE OIL AND SALT.
ANTIMONY, Japan Needle.
ARROW ROOT.
BENZOLE AND SOLVENT NAPHTHA.
CALCIUM CHLORIDE.
CHALK, Precipitated.
CHLORAL HYDRATE, Crystals and Crusts.
CREOSOTE OR DEAD OIL.
DEXTRINE.
FORMALDEHYDE.
GUMS, ELEMI, SANDRAC, Etc.
JALAP ROOT.
LYCOPODIUM.
MAGNESIA CARBONATE.
MANGANESE BORATE.
MENTHOL.
NAPHTHALINE, All Kinds.
NUT GALLS, Aleppo.
OIL, COD LIVER.
OIL FUSEL, Crude or Refined.
OIL MINERAL, White.
OIL MYRBANE.
OIL OLIVE, Malaga, Italian.
OIL RAPE, Refined.
OIL SASSAFRAS.
OIL WOOD, Chinese.
PITCH, STEARINE (Candle Tar).
POTASH CHLORATE.
POTASH CYANIDE, Beckton.
POTASH PERMANGANATE.
POTASH PRUSSIATE, Yellow.
SODA CHLORATE.
SODA PRUSSIATE, Yellow.
SUGAR OF MILK.
WAX CARNAUBA.
WAX JAPAN.
WAX PARAFFINE.
WAX SPERMACETI.

AGENTS FOR THE FOLLOWING HOUSES:

THE AMERICAN MAGNESIA & COVERING CO., Carbonate of Magnesia.
THE GAS LIGHT & COKE CO., London, Coal Tar, Creosote, Cyanide, Yellow Prussiates, Naphthalene, Carbolic Acid, &c.
HOWARDS & SONS, LONDON, Caffeine, Calomel, Benzoic Acid.
J. B. LAWES & CO., London, Citric and Tartaric Acids.
THOMAS TYRER CO., London, Phosphoric Acid, Hypophosphites.
NATIONAL MILK SUGAR CO. (Marengo Factory).
CHARLES LOWE CO., Manchester, Carbolic and Cresylic Acids.
JOHN & E. STURGE, Birmingham, Precipitated Chalk.

Please Write for Lists, Circulars, Samples and Quotations.

AMERICAN ANILINE COLORS

(Special Correspondence to the Reporter.)

Production of Asphaltum.

Washington, July 17, 1903.

The annual report of the United States Geological Survey upon the production of asphaltum during 1902, which has just been completed, is of more than usual interest, owing to the space given to the production of those grades used in the manufacture of various kinds of varnish. The statistics for the United States are supplemented by some interesting figures with regard to the production of manjak and gilsonite in Cuba and other islands of the West Indies, which are used in the manufacture of fine varnishes, substitutes for sealing wax, etc. Following is an advance abstract of this report:—

"The general term 'asphaltum' may be applied to the numerous varieties of hydrocarbons of an asphaltic base which exist in all conditions from the liquid to the solid state. In this report, however, it is specifically used to include all the purer forms of hard and soft bitumen, i. e., elaterate, gilsonite, albertite, wurtzilite, uintaite, nigrite, brea, etc. The statistics of crude petroleum, which may also be included in the general term 'asphaltum' are given in the report devoted to petroleum. A large quantity of asphaltic oil is produced in California, which is refined for illuminating and lubricating oils, and as there is no strict line of demarcation between oils which should be considered as petroleum and those which should be considered as asphaltum, the general rule has been observed to include under asphaltum only material used as such, for instance, the residuum from petroleum refining processes which is sold and used as asphalt. For the year 1902 asphalt of this character is reported separately under the heading 'by-product asphalt.' A slight duplication may arise in a few instances from this arbitrary classification, but it is impracticable to separate the two products absolutely. The term 'bituminous rock' includes sandstones and limestones impregnated with asphaltum or bitumen which are sold and shipped without previous refining. An inconsiderable portion of bituminous rock is treated to obtain asphaltum or bitumen, the product being sold as refined or gum asphalt.

"The following table shows the annual production of asphaltum, etc., in the United States during the past five years:—

Years.	Quantity. Short tons.	Value.
1898	76,337	$675,649
1899	75,085	553,904
1900	54,389	415,958
1901	63,134	555,335
1902	99,659	677,594

"It will be seen from the above table that the production of asphaltum in 1902 showed a large increase over that of 1901, amounting in quantity to 36,525 short tons, and in value to $122,259. The relatively smaller increase in value as compared to quantity was due to the very large proportion of bituminous rock, which is of less value per ton. The production in 1900, both in quantity and in value, and the production in 1901 in quantity, have been the smallest reported during the last seven years.

"The following table classifies the production of asphaltum during the past two years, from which it will be seen that the gum asphaltum, the maltha and the by-products from oil refining are of vastly greater importance than the bituminous rock, used for paving, etc:—

Variety.	1901 Quantity. Short tons.	1901 Value.
Bituminous sandstone	34,248	$138,601
Bituminous limestone	6,970	33,375
Hard and refined, or gum	19,316	333,509
Liquid, or maltha	2,600	49,850
By-products from oil	.....	.....
Totals	63,134	$555,335

Variety.	1902 Quantity. Short tons.	1902 Value.
Bituminous sandstone	57,837	$156,993
Bituminous limestone	1,869	7,817
Hard and refined, or gum	22,321	264,817
Liquid, or maltha	1,605	20,172
By-products from oil	16,027	227,795
Totals	99,659	$677,594

"From the above figures it will be seen that the production of hard and refined asphaltum, which include gilsonite and similar purer varieties, increased from 19,316 short tons in 1901 to 22,321 short tons in 1902. The production of liquid asphaltum, or maltha, all of which was derived from California, decreased from 2,600 short tons in 1901 to 1,605 short tons in 1902. The quantity of asphaltum produced in the refining of crude oil during 1902 amounted to 16,027 short tons. In former years the quantity of asphaltum so produced has been included under the class 'hard and refined asphaltum.'

"The importation of asphaltum into the United States is chiefly from the island of Trinidad, off the coast of Venezuela, and this product is used chiefly for roofing and paving. The product used in the manufacture of varnishes is produced chiefly in the United States, though small quantities are imported from Germany, Cuba, Mexico, and other countries. In comparing the imports with domestic production, it is seen that the value of the domestic product in 1902 was about $123,000 greater than that of the imported asphaltum.

PRODUCTION IN THE WEST INDIES.

"On the island of Barbados, nine manjak mines were operated during 1902, three of which were controlled by the Barbados Manjak Mines, Limited, employing from 70 to 100 laborers. No statistics of production are made to the government, but the customs returns showed that during 1901 1,043 tons of manjak, valued at £9,394, were exported from Barbados. The chief uses for manjak ore, or glance pitch, as it is sometimes called, is to make Brunswick varnish, used to insulate electric cables, etc. The exports from Barbados in long tons during recent years are reported as follows—1897, 1,880; 1898, 1,160; 1899, 1,026; 1900, 1,120; 1901, 1,043.

"In addition to the output of paving asphaltum from the island of Trinidad, a liquid asphalt has been found in various parts of the island from which illuminating and lubricating oils can be distilled, and glance pitch is also found on the island, and is used for electric insulations and for black varnishes. Manjak, another variety, has recently been discovered in quantities in the island.

"The output of asphaltum in Cuba in 1901 amounted to 4,554 tons, valued at $96,380, of which all but 500 tons were exported. Of the total shipments, New York received 3,300 tons, while 754 tons went to Europe, the bulk of which was shipped to Germany, and the remaining portion to England. The selling price ranged from $4 to $50 per ton. There were nine concerns engaged in mining asphalt.

"A Spanish company is engaged in developing several mines in the province of Pinar del Rio, Cuba. The company has entered into contracts to ship their product to the United States. The Habana mine, situated 19 miles east of the city of Havana, was worked during 1902, and the product shipped to New York and European ports. The material is pronounced a pure gilsonite, suitable for varnish and japan manufacture. In this province the Arizona-Cuban Asphalt and Mining Company, incorporated with a capital stock of $5,000,000, has located asphalt properties near Jaruco, and is said to own 13 claims in the eastern provinces.

"Of the several deposits around the Bay of Cardenas, in the province of Matanzas, the Perseverancia alone was worked last year. It produces an inferior grade of asphalt, which sells in New York for $20 per ton. The most productive of the mineral tar deposits near Sabanilla de la Palma was operated by the Hamel-Reynolds Asphalt Mining Company. The mineral tar is won by sinking a well and removing from time to time the material which oozes into the excavation from the surrounding rock. The well owned by the company is 250 feet deep, and yields about one ton per day. It is planned to erect a refinery and to continue the development of the property. Near the mouth of the Rio de la Palma a deposit of soft bitumen has been prospected.

"The most important asphalt mine in the vicinity of Santa Clara is on the Santa Eloisa property, in the Barrio de Loma Cruz. A portion of the product, which is characteristized as a hard glance pitch, is used with coal in gas manufacture, while some of it has been sent to New York and used in the manufacture of paints and varnishes. Of the mines in the district of Yaguajay, near the boundary of Santa Clara and Puerto Principe, only one—the Santa Rosa Eufemia—is at present productive. The asphalt from this mine resembles gilsonite very closely, but contains a large proportion of sulphur. It is used in the manufacture of fine varnishes. The Talaren mine, which yields glance pitch, has been worked for several years, and the product is well established in the markets of the United States."

Variable Prices for Petroleum in London.

The cheapness of petroleum is clearly seen from the following ranges of quotations for the different kinds of mineral oils at the opening of the year, the commencement of the present month, and also the first week in July last:—

	American refined. d. d.	Water-white. d. d.	Russian. d. d.	Roumania. d. d.
Jan. 3, 1903	..6 @6¼	8 @8¼	4⅝@4½	4⅝@4¾
July 4, 1903	..5⅞@6	7¼@8	4⅜@4½	5½
July 5, 1902	..6¼@6⅜	7¼@7⅜	5⅛@5¾	5½@5¾

The depreciation in value has, till lately, been principally in Russia and Roumanian oils, which have been pitted against each other for a bigger share, if not the entire monopoly, of the European trade, and so severely have prices been cut down that those of Russian, more particularly, were last month not only ¼d. to ½d. per gallon lower than at the beginning of January, but were likewise 1½d. per gallon under those in July last. During March and April, in consequence of a sudden collapse, the same description of oil was offering as low as 4d. to 4½d., with Roumanian at 4½d. to 4⅝., and American refined at 5¼d. to 5⅜d. per gallon on the spot. Subsequent sales of these kinds have been at a recovery of ½d. to 1d. in all positions, and the improvement seems now likely to be maintained. Nor is this surprising considering that the accounts given of the explorations in the oil fields are hardly so favorable to producers as could be desired, the greater frequency of what are called "small pumpers" and "dry holes" in wells being a discouraging feature in the general outlook; and it is feared that, with the exception of the region round about Texas, which continues full of promise for abundant yields, the number and quantity of decreases of mineral oil as reckoned in barrels in other parts will become more marked than the increases for the same as the season progresses. Extensive as were the aggregate imports of petroleum oil into the United Kingdom last month, being a total of 560,000 barrels, the whole of the past half-year's supply is still 175,000 barrels below that in the same period of 1902. But all the while the rates ruling in New York have scarcely moved, refined petroleum (in cases), as an instance, remaining at $10.50, as on Jan. 21, and Standard white alone advancing from $8.20 then to $8.55 now. A fact not to be lost sight of is that the main consignments of petroleum oils to this country are now taking diametrically opposite coures; one set of shipments (i. e., from America) falling rapidly away from the largely swollen receipts in the previous year; the other (those from the Muscovite territory) leaping forward till they are within close touch of the quantities imported by their formidable rivals. Thus it happens that, while the American imports into the United Kingdom are only 1,594,000 barrels, in contrast with 2,415,700 barrels in the first six months of 1902, the Russian shipments to this side during a similar period were extended to 1,443,800 barrels, in opposition to 848,000 barrels, which was about one-third more than arrived of that class of oil in the preceding year, and goes to prove the powerful influence it is capable of exercising over the movements of prices at critical stages of the world's production.—Oil Trade Review.

DRUG MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 34 and 35.

Saturday Evening, July 18, 1903.

Advanced.	Declined.
Opium, 25c.	Japan wax, ¼c.
Nitrate of silver, ½c.	Soap bark, 1c.
Oil sweet orange, 5c.	Oil bay, 15c.
Gamboge, 5c.	Pulsatilla herb, 1c.
Coriander seed, ½c.	Senega root, 5c.
	Canary seed, ½c.
	Lobelia seed, 3c.
	Poppy seed, ⅛c.

☞ Hamburg market letter on page 39.

Opium.

A continued upward tendency and great firmness were the principal characteristics of the opium market this week. There has been a good demand, both for case lots and jobbing quantities, while in Smyrna large speculative sales have been made all the way up to 9s. 9d. Upon the receipt of cable advices on Friday, reporting sales in Smyrna at 9s. 8d., one holder in this market advanced to $3.50, and others followed on Saturday. This is an advance from $3.30 and $3.35, to which points the market rose early in the week. Jobbing lots are now held at $3.55@3.60, as to holder, and powdered is quoted at $4.10@4.15, as to quantity, test, etc. Our cable advices follow:—

Smyrna, July 17, 1903.

Sales of 170 cases were made at gradually rising prices, up to 9s. 9d., and a further advance is expected. Arrivals continue small.

Constantinople, July 17, 1903.

The market is firm. Sales were made to speculators of 21 cases druggists' talequale at 8s. 9d.@9s. 4d.

Constantinople, July 17, 1903.

There have been sales of 9 cases Karahissar at 8s. 11d., and 12 cases druggists' talequale at 8s. 9d @9s. 5d. The market is rising.

Smyrna, July 18, 1903.

The market is well sustained with sales of 170 cases at 9s. 2d@9s. 9d. Arrivals, 246 cases, against 1,255 last year.

Smyrna, July 18, 1903.

We note an advance to 9s. 6d.@10s. Sales of 177 cases have been made to America and speculators. Arrivals, 235 cases.

Our mail advices follow:—

Smyrna, June 27, 1903.

Demand has shown no improvement this week and sales are limited to 23 cases, 16 of which have been taken by a local speculator. Notwithstanding this lack of business, holders are less anxious to sell than they were last week, this being due to continued unsatisfactory reports received from the interior. The gathering of the new crop is giving poor results, and the total yield will very likely be under what it was estimated at first. No definite figures of the outturn, however, can be given before all operations have come to an end. Under the influence of these reports, the market has gradually become stronger and there are very few sellers at the present quotations of 8s. 7d. (including 5 per cent. loss in weight), cost and freight, for new, ordinary druggists' and 8s. 7d.@8s. 10d. for old druggists' grades. Arrivals to date amount to 126 cases new opium, as against 310 cases for the same period last year.

Smyrna, June 30, 1903.

I regret to report that heavy rains having fallen within the past fortnight has again diminished the estimate of our crop, and to-day it is reckoned that this will not exceed 3,800 cases, including 800, the estimate of the Salonica yield this year. Very little business has been done during the month for consumers, as the sales which amount to 56 cases, 12 only are for America, 6 for England and the Continent and the balance for account of local and interior speculators. The market, notwithstanding the very small demand from consumers, keeps very firm at following quotations:—New, usual run, manufacturing material, as to quality, 8s.@8s. 6d.; old current talequale, 8s. 4d.@8s. 6d.; old selected manufacturing, 8s. 5d.@8s. 7d.; old Yerli, Karahissar and Boghaditz, 8s. 7d.@9s. 4d. per lb. f. o. b. The arrivals to date are 156 cases, against 450 at same period last year. No arrivals of new opium had appeared on the Constantinople market up to the 22d inst. Our stock in first and second hands is now 4,482 cases, against 2,301 same date last year, and in Constantinople 586, against 369.

Smyrna, June 26, 1903.

We regret to report this week heavy rains all over the country, but, as yet, we cannot say to what extent they have damaged the crop. Most of our lowland plantations have been harvested, but, in the high plateaus, the collecting period having just commenced, the rain will do a deal of harm. Already the reversed weather conditions have given a firmer tone to our market, and we have to report small purchases of old and new at 2d. per lb. advance. The sales amount to 23 cases, of which 16 are for interior account and 7 for shipment to America. We quote:—New current talequale, 8s. 2d.@8s. 4d.; old manufacturing druggists', as to quality, 8s.@8s. 8d.; Yerli and Boghaditz, as to quality, 8s. 8d.@9s. 2d.; Karahissar, sightly, 8s. 6d.@8s. 8d. per lb., f. o. b. The arrivals to date are 726 cases, against 310 at same period last year.

Smyrna, June 26, 1903.

The unusual and continued rains are prejudicial to the crop and the market is therefore somewhat firmer this week. Purchases of 23 cases, old and new manufacturing kinds, have been made at 8s. 3d.@8s. 9d. mostly by speculators. Arrivals of new opium aggregate 126 cases, against 310 cases last year. Quotations are as follows:—Boghaditz, Balukessar, superior, soft, sightly, 10s. 9d.; Yerli, soft, sightly, superior, 9s. 11d.; Yerli, manufacturing, 9s.; Karahissar, superior, selected, sightly, 9s. 9d.; Karahissar, manufacturing, sightly, 8s. 11d.; Karahissar, manufacturing, unsightly, 8s. 9d.; new, current, talequale, 8s. 3d., c. i. f. N. Y.

Constantinople, July 3, 1903.

Early in the week 20 cases Karahissar sold at 8s. 5d. and later 27 cases druggists' of different kinds at 8s. 1½d. Sellers then retired, owing to a telegram from the interior, reporting damage to the crop. To-day the nominal price for druggists' is about 8s. 8d.

Morphine.

A moderate amount of business is being done, but no large sales are reported. The market is very firm, in sympathy with the position of opium, but no advance seems to be talked of at this time. Quotations are $2@2.10 for bulk.

Codeine.

The market is steady on the basis of the former quotation of $3.50 for bulk in 10-oz. lots. There is a moderate demand, but the situation presents no particularly new features.

Quinine.

The Amsterdam bark sale, which will take place on Thursday, is looked forward to with great interest, as it is expected to go off at an advance, in view of the light offerings and the fact that no sale will be held at Amsterdam in August. It is expected that the auction will be followed by an advance in manufacturers' quotations. The New York quinine market is exceedingly firm at present, and second hands report a very good jobbing business. Sales of about 10,000 oz., in small lots of German and Java, principally the latter, have been made at full prices. There were also sales of 10,000 oz. Java at 20c., and 3,000 oz. at 20½c. An inquiry for 12,000 oz., at a little below 20c., could not be filled. Fresh German, in outside hands, has become very scarce, and dealers are asking 22½@23c., with little offering at the inside figure. Current German is quoted at 22c. Some small lots of Java are obtainable at 20c., but a general quotation is 20½c., and one dealer raised his views to 21c. on receipt of a cable stating that stocks at Batavia are exhausted and that no quinine will be obtainable there until the next auction, which does not take place until July 29.

Miscellaneous.

ACID, BENZOIC.—A steady but not particularly heavy demand is reported, and the market as a whole is in about the position noted in our last report. Prices are unchanged and steady, on the basis of previous quotations of 10@10½c. for English true, and 32@34c. for acid from toluol.

ACID, CITRIC.—Demand for citric acid is very fair and domestic manufacturers are firm in their views at former quotations of 35c. for barrels and 35½c. for kegs. We have the following correspondence on this subject:—

Messina, July 1, 1903.

Citrate of Lime.—The market this last fortnight has been very flat. Few sales have taken place for prompt shipment at £14 5s., but just at present it is a difficult matter to place any lot at £14. The general opinion is that the market will drop still further, for several sellers are looking to dispose of their merchandise, but there are no buyers unless at very low limits. As far as future delivery is concerned, the following prices have been done:—£13 for December-February and £12 17s. 6d. for January-March, but buyers to-day are waiting for lower figures. The new crop is reported to be a large one, and buyers will do well to wait.

ACID, SALICYLIC.—Former prices of 31@34c., as to quantity, are still

Established 1822. 133 William St., New York.

ROSENGARTEN & SONS, Incorporated,

Manufacturing Chemists, Philadelphia.

QUININE SULPHATE and other Salts of Quinine.
MORPHINE SULPHATE and other Salts of Morphine.
CODEINE and Salts of Codeine.

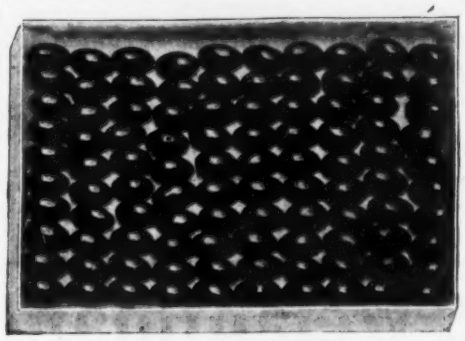
POTASSIUM IODIDE and other Iodides.
POTASSIUM BROMIDE and other Bromides.
BISMUTH SUBNITRATE White and Bulky.

McKESSON & ROBBINS,

NEW YORK.

OFFER AT SPECIALLY ADVANTAGEOUS TERMS,

Arrowroot, Bermuda & St. Vincent
Cod Liver Oil, Spot & Future
Balsam Fir
Gum Gamboge,
Lycopodium,
Valencia Saffron,
Olive Oil,
Opium,
Menthol,
Caffeine,
Thymol,
Aloin,
Venice Turpentine,
Cape Aloes, True,
Oils Peppermint, Bay, Santal, Cloves, Cubebs, &c.



FILLED ELASTIC CAPSULES

SPECIAL PRICES IN BULK.

LARGE or SMALL QUANTITIES

BILLINGS, CLAPP CO.,
BOSTON.

Frankfort A|M **ZIMMER & CO.** GERMANY

Offer to the Trade their Strictly Prime

Cocaine,

SPOT AND FOR FUTURE DELIVERY, IN QUANTITIES TO SUIT AT LOWEST MARKET QUOTATIONS

Represented in New York by

Sole Agent, R. W. PHAIR, 16 Platt Street

BAKER'S REFINED

CAMPHOR

Quality Unexcelled.

H. J. BAKER & BRO., Camphor Refiners, 100 William St., New York

Schieffelin & Co.

NEW YORK,

Offer Special Inducements to buyers of the following:

Arrow Root, St. Vincent.
Arrow Root, Bermuda, Genuine New Crop.
Chalk Precipitated, English.
Grains Paradise.
Gum Elemi.
Manna, sorts.
Manna, small flake.
Irish Moss, Bleached.
Oil of Poppy.
Chlorate of Potash, French.
Musk Root.
Rape Seed, English.
Wormseed, Levant.
Sabadilla Seed.
Strophanthus Seed, Kombe.
Larkspur Seed.
Althea Root, cut, new.
Colocynth Apples, Trieste.

New York Quinine & Chemical Works, Ltd.

114 WILLIAM STREET, NEW YORK.

Cocaine, Quinine, Iodoform, Codeine, Morphine
Acetanilid, Potassium Iodide, Strychnine,
Bismuth Subnitrate

We make upon a very large scale, and of excellent quality, and as our prices are no higher than those of other manufacturers, we most earnestly ask for a portion of your business when ordering.

FRATELLI JUNG, PALERMO. SICILY.

Wholesale Dealers and Exporters Sicilian Produce n general, more specially:

Almonds, Filberts, Mustard Seed, Canary Seed, Pistachios, Manna, Essence of Lemon, Dried Peel, Licorice Juice.

DANIEL GROZ SOEHNE

EBINGEN, GERMANY,

Exporters of Botanic Drugs. Drug Millers

Correspondence Solicited.

Borax and Boracic Acid.

Pacific Coast Borax Co.

Eastern House: 100 William St., NEW YORK.
Western House: Ashland Block, CHICAGO.
San Francisco House: 100 Sansome Street.

Established 1841. Incorporated 1897.

SUBLIMED (Chamber) STRAIGHT

Flowers of Sulphur

Also Flour Sulphur.

ROLL and VIRGIN ROCK BRIMSTONE.

T. & S. C. WHITE CO., 28 Burling Slip, New York City.

F. M. RUDD, Bronson, Michigan.

Superior Quality Natural and Redistilled

OILS, SPEARMINT, TANSY, ERIGERON and WORMWOOD.

DIAMOND WHITE Redistilled and Refined SPEARMINT, TANSY, Etc., are guaranteed highest grade produced. *SAMPLES ON REQUEST.*

SOLE AGENT, **R. W. PHAIR** 16 PLATT STREET, NEW YORK.

Sole Agent for Chemische Fabriken Gernsheim—Heubruch, Rheinau near Mannheim, Germany.

CHLORAL HYDRATE, PRECIP. CHALK, NITRATE STRONTIA and BARYTES, Etc.

Powers & Weightman,

PHILADELPHIA,

And No. 56 MAIDEN LANE, - - NEW YORK.

Manufacturers of

QUININE. QUINIDINE. CINCHONIDINE. CINCHONINE. Sulphate and other Salts.
MORPHINE—Sulphate and other Salts.
CODEINE. STRYCHNINE. SILVER NITRATE. BROMIDE and IODIDE POTASSIUM.
CHLOROFORM. ETHERS. MERCURIALS. EPSOM SALT. COPPERAS.
ACIDS—Tartaric, Citric, Sulphuric, Nitric, Muriatic, Etc.

AND A GENERAL ASSORTMENT OF

CHEMICALS FOR USE IN MEDICINE AND THE ARTS.

MANUFACTURERS, LARGE DEALERS, read the OIL, PAINT AND DRUG REPORTER

Business Established by A. M. Todd, 1869.

Cable Address: "Crystal Kalamazoo."

A. M. TODD CO., Ltd.,

Growers, Distillers and Refiners of

ESSENTIAL ..OILS..

CRYSTAL WHITE---DOUBLE DISTILLED.

Peppermint, Spearmint,

Wintergreen, Etc.

We respectfully invite the attention of Consumers to the fact that we are the most extensive producers of American Essential Oils, and enjoy facilities for cultivation and distillation possessed by no other House. With approved appliances which we have perfected during over thirty years of active experience, growing the plants upon the largest scale upon our own lands, and possessing distilleries of the most modern improvements, we *guarantee* every product bearing our name as producers, to be *ABSOLUTELY PURE* and of the *HIGHEST QUALITY IN EVERY RESPECT*, and are able to supply the same at a minimum cost for pure quality.

MAIN OFFCE AND WORKS:

KALAMAZOO, MICH., U. S. A.

quoted, and the market is without anything in the way of new feature.

ALCOHOL.—Competition is still a more or less unsettling factor in the market for grain alcohol, but there has been no quotable change in prices, which range, nominally, from $2.39@2.40, as to quantity. Wood alcohol is in demand and firm at 65c. for 95 per cent. and 70c. for 97 per cent.

ALOIN.—No change of any kind has come over the situation. The jobbing demand is of average proportions, and the market holds steady at previous quotations of 35@40c., as to quantity and quality.

AMMONIA, CARBONATE.—There are no new features to report in connection with this article. The market is firm on the basis of previous quotations, as follows:—Domestic, 7½@8½c.; foreign, 8¼@9¼c., as to quantity.

BALM OF GILEAD BUDS.—There is very little demand at present, and the market is devoid of anything in the way of interesting features. Former quotations of 28@32c., as to quantity and seller, are still current, but are somewhat nominal.

BAYBERRY WAX.—There is very little demand for this article at present and while 16@18c., as to quantity, is still quoted, these figures could probably be shaded.

BEESWAX.—The market is still rather easy, but there has been no quotable change in prices since the decline to 31½@34½c. for yellow wax, as to quality, noted in our last report.

BISMUTH PREPARATIONS.—The situation is without noteworthy change. Trade is of average proportions and prices are steady on the basis of previous quotations, as follows:—Citrate, $2.35@2.40; subcarbonate, $2.25@2.30; subgallate, $2.15@2.20; subnitrate, $2@2.05, as to quantity.

BORAX.—Business is reported to be good and the market is steady at unchanged quotations of 7½@7¾c. for barrels, 7¼@7½c. for bags and 7½@8c. for powdered, as to quantity, the inside figures being for carload lots.

BROMIDES.—No further change has occurred, either in prices or market conditions, since the advance noted last week. Quotations are repeated, as follows:—Ammonium, 40@48c.; potassium, 30@38c.; sodium, 35@43c., as to quantity and seller.

CALOMEL.—There is an average demand for calomel and the market is steady, but without new feature, at former quotations of 86@88c. for American and $1 for English.

CARNAUBA WAX.—Supplies of No. 3 wax are still very light and the market is very firm. This last, however, applies with equal force to all grades. Demand is good. Quotations follow:—Flor, 21@23c.; No. 1, 18½@22c.; No. 2, 17@19c.; No. 3, 15½@16½c., as to quality and quantity.

CASTOR OIL.—Demand for castor oil is of a routine character. The market is steady at former quotations of 9¾@11¾c. for barrels and 10¼@12¼c. for cases, as to brand and quantity.

CASTILE SOAP.—The situation contains no unusual features and the market continues steady under a fair demand on the basis of 10⅝c. for Conti's white ex store.

CERESIN.—Market conditions remain about as noted in our last report. The firmness, which has characterized the situation for some time, is still apparent, but quotations show no change from the basis of 14@17c. for white and 13@15c. for yellow, as to quality and quantity.

COCAINE.—We have to report a continued firm market in sympathy with conditions abroad, but there has been no change in quotations from $4@4.25, as to quantity, and the demand is not as brisk as it might be.

CODLIVER OIL.—There has been no break in the quiet condition of affairs heretofore reported, neither has there been any break in the firmness of holders, who are steadily maintaining the quotations noted in our list of prices current.

COLOGNE SPIRIT.—The market holds firm at former quotations of $1.31@1.33, as to quantity, but there are no new features to report. Demand is fair.

COMMARIN.—Demand is by no means over-active, but the market has a steady undertone at former quotations of $3.50@5, as to quantity, quality and seller.

CREOSOTE is in regular demand and the market is steady, though lacking in new features at unchanged prices of 85@90c. for beechwood, as to quantity.

ERGOT.—Although advices from abroad report firmness, the market here is unchanged and dull at 28@29c. for either Spanish and Russian, as to quality, quantity and holder. We publish, at the end of this report, a letter from Hamburg stating that the Spanish crop will be very small.

FORMALDEHYDE is in fair demand at steady and unchanged prices, as follows:—38 to 40 weight per cent., 15@16c.; 40 volume per cent., 14@15c.

GLUCOSE.—The movement of goods is slow. Mixers hold off and others buy in a hand-to-mouth manner only. The market is fairly steady, however, at unchanged quotations on the basis of 1.95c. for 42 deg. in carload lots, delivered at New York.

GLYCERINE.—Demand for C. P. glycerine continues to be very fair and the firmness of the market is maintained on the basis of former quotations of 14½@15½c. for bulk, as to quantity and seller. Quotations for dynamite glycerine are unchanged at 13@13⅛c., as to quantity, and the market is dull and easy. We have the following correspondence:—

Paris, July 3, 1903.

Glycerine.—The position of our market is unchanged this week. The demand seems to be better and is chiefly from Germany for saponification, shipments over the balance of the year. We quote as follows:—Saponification, 117 frs.; soap lye, 92½ frs. per kilos. c. & f. N. Y.

HYPOPHOSPHITES.—An average demand is manifest and the market is steady, but devoid of anything in the way of new feature. Lime, potash and soda are quoted at 48@50c., as to quantity.

IODINE.—The same may be said of this article, which is steadily held at $2.70@2.75 for re-sublimed, as to quantity.

ISINGLASS.—There is a regular jobbing demand for the various grades of isinglass, at steady and unchanged quotations, as noted in our list of current prices.

JAPAN WAX.—Owing to the light demand, increased stocks and some selling pressure, prices have declined to 14@14½c., and the market is easy.

MENTHOL.—The market is unsettled, and while $7 is quoted very generally for cases, jobbing quantities are obtainable, in some quarters, at lower prices. There was quite a little demand early in the week, but trade was quieter at the close.

MUSK.—Demand is for small jobbing lots. The market is firm at quotations noted in our list of current prices, owing to light supply.

NAPHTHALINE.—Demand is good and the market is firm, but unchanged, at former quotations of 2¼@2½c. for balls or flakes, as to quantity.

NITRATE OF SILVER.—In sympathy with the cost of production, manufacturers of nitrate of silver have advanced prices and now quote 34½@38c., as to quantity, the inside price being for 1,000-oz. lots.

QUICKSILVER.—There is a very fair demand reported for quicksilver and the market is firm and unchanged at previous quotations of 63@65c., as to quantity. We have the following from London:—

IMPORTS.

	1903.	1902.	1901.	1900.
June, bottles.....	6,482	4,564	5,684	411
January-June, bottles	33,072	31,575	26,514	4,208

EXPORTS.

June, bottles.....	761	617	5,356	862
January-June, bottles	11,984	12,581	15,198	12,435

SALICINE.—A regular demand is manifest for salicine and the market holds steady on the basis of previous quotations of $3.75@3.85 for bulk, as to quantity.

SANTONINE.—The market is very firm in sympathy with the position of the raw material, and an advance in prices is looked for in some quarters. Present quotations are $6.95 for bulk, in 25-pound lots, and $7 for less.

SPERMACETI.—Demand is slow and the market is uninteresting. Prices are without quotable change, but are somewhat nominal, as follows:—Block, 22@22½c.; cakes, 23@23½c., as to quantity.

THYMOL.—The market is very dull and prices are nominal, although unchanged at $1.80@1.90, as to seller.

Balsams.

The market for tolu balsam is quiet and easy, although there has been no quotable change in prices from 25@27c., as to style of package, these figures could be shaded.

Prices for Central American copaiba are nominally unchanged at 35@38c., as to quality and quantity, but the market is still unsettled by competition, and dealers would probably make concessions. Para is unchanged and fairly steady at former quotations of 42½@45c.

Peru continues to move very slowly at nominally unchanged quotations of 97½c.@$1.05, as to quality, quantity and holder.

Supplies of Canada and Oregon fir are light, and, in consequence, the market holds firm at quotations noted in our list of prices current. There is not much demand.

Barks.

The market for cascara sagrada is unchanged at 13@15c., as to quality and

quantity, but there is a firmer undertone owing to cables reporting activity abroad, with diminishing supplies.

Cascarilla bark continues in light supply and firm at unchanged quotations, as noted in our list of prices current.

There is an easy feeling apparent in the market for prickly ash bark, but prices show no quotable change from 20@25c., as to quality, quantity and holder.

Supplies of elm bark are more plentiful and the market is consequently easier. Select slabs in bulk are freely offered at 25c. and bundles at 30c.

Stocks of cottonroot bark are still very light and the market retains its firm tone at 10@12c., as to quantity and holder.

Sassafras bark moves rather slowly and the market is more or less easy at former quotations of 6½@8c., as to quality and quantity.

The market for soap bark is rather easy and lower, in consequence of more liberal supplies. Whole is quoted at 5½@6c. and cut at 6½@7c.

We have the following correspondence regarding articles in this department:—

Trieste, June 27, 1903.

The new crop of buckthorn bark is in hand now, but it has been a much smaller one than that of last year, and we think it possible that the price will be higher for some time to come.

Barberry bark of root and stem is in good supply now and offered as follows:—Root bark, 8½@9c.; stem bark, 4½@5c. per lb. c. & f. New York, as to quality and quantity.

Beans.

Demand for calabar beans is only moderate at best and the market is the object of little attention at present. Quotations of 14@20c., as to quality, quantity and holder, are more or less nominal.

The market for St. Ignatius beans contains nothing of interest, and is nominally unchanged at 12@16c.

The movement of tonka beans is slow and involves only jobbing lots, at the following quotations:—Angostura, 60@65c.; Para, 17½@22½c.; Surinam, 30@35c., as to quality, quantity and seller.

There has been a fair jobbing demand for Bourbon and Mexican vanilla beans at firm and unchanged quotations, as noted in our list of prices current. The London Commercial Record reports the recent auctions as follows:—

Vanilloes.—At public sale on Wednesday, 455 tins were offered and about 260 tins sold. Short black and common brown and foxy beans realized fully last sales' rates to 1s. advance, but fair to fine medium and long lengths were in excessive supply and were mostly bought in, offers for them being much below importers' ideas. Mauritius, fair to good, 9 to 9½ inch, realized 24s.; 7½ to 8 inch, 14s.@16s. 6d.; 7 to 7½ inch, 13s.; 6 to 6½ inch, 8s. 6d.@11s.; 4 to 6 inch, 7s. 9d.@8s. 6d.; good splits 7 to 8½ inch, 9s.@11s. 6d.; 6 to 7 inch, 7s. 6d.@8s. 3d.; 4 to 6 inch, 6s. 6d.@7s. Seychelles, fair to good, 7 to 8 inch, 11s. 6d.; 6½ to 8 inch, 9s. 6d.; 5½ to 7 inch, 7s. 9d.@8s. 3d.; 3 to 6½ inch, 7s. 6d.@8s. 6d.; good split, 4 to 7½ inch, 5s.@7s. 6d.; common and foxy, 4s. 6d.@5s. 3d.; mouldy, 1s. 9d.@3s. 9d. Ceylon, common, 5½ to 7 inch, 4s. 6d.@5s. 3d.; 4 to 6 inch, 3s.@4s. 6d. per lb.

Berries.

Juniper berries are unchanged at 3@3¼c., as to quantity. There is a fair demand and the market is steady.

The market for cubeb berries is dull and nominal at former quotations of 7½@8c. for whole. These prices could be shaded.

Prices for prickly ash berries continue rather nominal in the absence of important demand. Quotations are 14@15c., as to quantity.

There is very little demand for raw palmetto berries, even at the somewhat nominal quotations of 28@30c.

Essential Oils.

Recent advices from Michigan state that the peppermint oil crop will amount to about 150,000 lbs., against about 140,000 lbs. last year. The market is quiet so far as demand is concerned and is somewhat unsettled by competition. Bulk is quoted nominally at $2.60@2.80, as to quality, quantity and holder. The following letter from Michigan was received just before going to press:—

From reports we have received from four producers of peppermint in Van Buren county we find that, in every case, the yield was even smaller than that of last year, in many cases the charges yielding only four pounds of oil, which is less than one-half of the normal yield. As in some cases the mint was looking fairly well, the growers are greatly disappointed. The chief cause assigned is the fact that practically all of the land on which peppermint is grown has been cultivated with that crop for many years, on account of which the oil constituents have become exhausted, so that normal crops cannot be expected until new land is cleared for the purpose. Neither last year nor this year has it been possible to clear new land, owing to the scarcity of labor.

According to reports from abroad, the Bulgarian crop of otto of rose is a large one, some figures making it over 100 per cent. greater than last year. It is expected that lower prices will prevail, but as yet no change has been made. The following figures from Kazanlik show the yields of 1902 and 1903:—

	Kilos—	
Cantons.	1903.	1902.
Kazanlik	2,025	911
Nova Zagora	198.5	145
Stara Zagora	202.5	132
Tchirpan	152	56
Karlovo	1,480	802
Konari	181.5	164
Brezovo	637.5	227
Philippopoli	30	5
Pechtera	120	77
Total	5,027	2,519

Pennyroyal is in demand and the market is firm at former quotations of $1.15@1.25.

A better crop of African rose geranium is reported and the market is a little easier at $5@6, as to quality and holder.

Supplies of oil of bay are more plentiful and quotations show a decline, in consequence, to $2.60@2.75, as to quality and holder.

Demand for oil of lemongrass is moderate to fair, at quotations of $1.80@1.90, as to quality and seller.

There is a good demand reported for citronella and the market is steady at 20@22c., as to quantity, quality and holder.

Natural sassafras continues to occupy the firm position noted in our last report, at former quotations of 40@45c., as to quality and seller.

In sympathy with cablegrams from the primary market, sweet orange oil is considerably firmer and prices have been advanced to $1.65@1.70, as to quality and seller. Bergamot and lemon are unchanged. We have the following correspondence:—

Messina, July 3, 1903.

Business is more than usually quiet. Complaints, in fact, of exceptionally dull trade are general. Seldom has the position been so dull as it is at present. Prices for lemon oil are now lower than they have been for some time past, and the competition became so severe at last that the margin of profit is reduced to a point where it is no longer possible to carry the load. Oil of sweet orange is held firmer again, just now, and is likely to further advance until the new crop appears, owing to the very small available supply on spot. As to oil of bergamot, the evidence all points to the continuance of a strong market, with chances rather favoring an advance than a decline, because of the fact that present stocks are well concentrated in strong hands. To-day's lowest quotations are as follows:—Oil lemon, 2s. 2d.; oil sweet orange, 5s. 9d.; oil bergamot, 36 to 38 per cent. linalool, 8s. 3d.@8s. 10d. per lb. c. i. f., as to grade and quantity.

Flowers.

There is very little of interest to report in connection with the articles in this department.

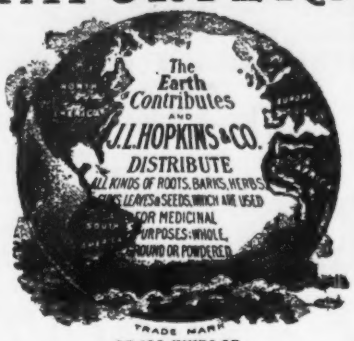
Arnica flowers are in moderate jobbing demand at former quotations of 8½@9c., as to quantity.

There is a fairly good demand for chamomiles at unchanged quotations, as noted in our list of prices current, but we hear of no large business.

We have the following correspond-

ESTABLISHED 1844.
A. LAVINO & CO.,
SMYRNA, TURKEY IN ASIA.
PACKERS OF THE
A. L. & CO.
NATURAL OPIUM.
Specify A. L. & Co. Opium when ordering Genuine Gum

ISDAHL & CO.
Manufacturers of
Finest Lofoten
COD LIVER OIL
BERGEN, NORWAY.

IMPORTERS


OF ALL KINDS OF
CRUDE DRUGS
J. L. HOPKINS, & CO.
100 William Street, NEW YORK

SMITH & NICHOLS, Manufacturers and Importers
CARNAUBA WAX
CERESINE (White and Yellow)
BEESWAX (White and Yellow)
145 and 147 Front Street, - - - - NEW YORK

NEW YORK SHELLAC CO
229 PEARL STREET
DIRECT IMPORTERS

F. VARALDI CANNES, FRANCE.
Manufacturer and Distiller Pomades, Essential Oils, Etc.
—REPRESENTED BY—
D. W. HUTCHINSON, - 5 Cedar St., New York.

SUPERIOR QUALITY
REFINED CAMPHOR AND CAMPHOR FLOWERS
THE AMERICAN CAMPHOR REFG. CO
14 Fulton Street, Boston, Mass.
Represented in New York by T. M. CURTIUS, 5 Platt Street.

SOZIO & ANDRIOLI
ESTABLISHED 1757
GRASSE, FRANCE
Perfumers' and Soapmakers' RAW MATERIALS
HIGHEST GRADE ESSENTIAL OILS
SPECIALTY: POMADES No. 48
Guaranteed Pure and Finest Made
SOLE AGENT UNITED STATES AND CANADA
P. R. DREYER
Stock in New York 68 BROAD STREET, New York

MAGNUS & LAUER, 92 PEARL STREET, NEW YORK, N. Y.
Sole Agents for E. Sachsse & Co., Leipzig, Germany; Spurway & Co., Cannes, France
G. E. Peirce, Messina, Italy.
Specialties:
ESSENTIAL OILS for the Wholesale Drug Trade and Manufacturers of Soaps and Perfumes
APPLICATION FOR OUR GENERAL PRICE LIST INVITED

NORTH / SOUTH / EAST / WEST / GOES THE OIL PAINT AND DRUG REPORTER

Essential Oils
FLAVORING & PERFUMERY MATERIALS
The D & O Brand
"THE STANDARD OF QUALITY"
Dodge & Olcott - New York

ESTABLISHED 1768
ANTOINE CHIRIS
GRASSE, FRANCE
PURE ESSENTIAL OILS
American Branch:
18-20 Platt St., New York
Euler & Robeson, Gen'l Agts.

GLYCOSINE, (550 times sweeter than Sugar)
RHODINOL II, (Synthetic Oil of Rose)
SALICYLATE OF SODA,
SYNTHETICAL PERFUMES,
ANTIPYRINE,
HYDROQUINONE,
FORMALDEHYDE,
RESORCIN, (Medicinal)
SEND FOR PAMPHLET
OIL OF WINTERGREEN
We manufacture chemical specialities of highest order only, and solicit correspondence
Special contract quotations, with broad guarantee, given upon reqest.
Write to-day for Pamphlet, Quotations, etc., to
FRIES BROS., MFG. CHEMISTS,
92 Reade Street, NEW YORK

LANOLINE ("Liebreich") Anhydrous and Hydrous
ADEPS LANAE (B. J. D.)
is made only by the
VEREINIGTE CHEMISCHE WERKE AKTIENGESELLSCHAFT
vormals BENNO JAFFE & DARMSTAEDTER
CHARLOTTENBURG-BERLIN
Insist upon receiving the original and reliable product. Look for the Trade-Mark and refuse all cheaper and impure substitutes.
TRADE MARK
DARTRING
VICTOR KOECHL & CO.
SOLE AGENTS NEW YORK

H. A. METZ & CO.
122 Hudson Street, NEW YORK, N. Y.
SCARLATOL, Patented.
PARATOL, Patented.
For the production of permanent Para-Reds without diazotizing.
BRANCHES:
BOSTON, PHILADELPHIA, PROVIDENCE, CHICAGO.
CHARLOTTE, N. C., ATLANTA, GA., NEWARK, N. J.,
MONTREAL, CAN. FRANKFURT, A/M. GERMANY.

GRANULATED AND POWDERED
CAUSTIC SODA
ALL GRADES,
In Bbls., Half-Bbls., Kits and Cans.
THE
HARSHAW FULLER & GOODWIN CO.
CLEVELAND NEW YORK
Works: ELYRIA, OHIO.

Sal Ammoniac
Bi-Chromate Potash and Soda
Phosphoric Acid
Formaldehyde
THE ROESSLER & HASSLACHER CHEMICAL COMPANY NEW YORK CHEMISTS TRADE MARK
THE ROESSLER & HASSLACHER CHEMICAL CO
100 William Street, NEW YORK

ence regarding several articles on the list:—

Trieste, June 27, 1903.

Insect Flowers.—The market remains dull, as in the past, and prices are again lower. The last sales have been effected as follows:—Closed, 25@27c.; half-closed, 13@22c.; open, 11@12c. per lb. c. & f. New York. The new crop is coming in more freely now and as it seems that it will be a rather large one this year, somewhat lower prices are to be expected.

The new crop of arnica flowers is coming in now, but we hear that all lots that have come to hand are of an inferior quality and dark in color, in consequence of heavy rains that fell in the gathering districts during the last few weeks.

Gums.

Demand for camphor is good and the market retains its firmness at former quotations of 55½c. for barrels and 56c. for cases.

The market for arabics continues firm at quotations noted in our list of current prices. There is a fair demand, but the situation contains no particularly new features.

Supplies of Cape aloes continue light and we hear of no goods offering below 14c., at which figure only limited quantities are obtainable.

Advices from the other side report increasing firmness in myrrh. As has been the case for quite a while, the market here is sympathetic, but prices are unchanged at 20@35c., as to quality, quantity and holder.

The market for gamboge is dull but firm, in sympathy with advices from the other side. Holders here have advanced their views and now quote 85@90c. for pipe, as to quality and quantity.

Demand for kino keeps quiet and the market has a more or less easy tone at nominally unchanged quotations of 22@25c., as to quality, quantity and holder.

Medium grades of Aleppo tragacanths are in fair demand and the market is firm at the figures noted in our list of current prices.

The market for asafoetida is quiet but steady at former quotations of 19@25c., as to quantity, quality and holder.

Demand for chicle is moderately good and the tone of the market is firm at former prices of 45@50c.

Herbs and Leaves.

There is a very fair demand for the sweet herbs at steady quotations, as noted in our list of current prices.

Demand for senna is good and the market is firm at unchanged prices. Most attention is absorbed by the medium grades of Tinnevelly.

Coca leaves are in moderate to fair demand and the market is unchanged and firm at 17½@19c. for Truxillo leaves and 28@30c. for Huanoco, as to quantity and quality.

There is a moderate demand for jobbing lots of short buchu leaves and the market holds steady at former quotations of 23@25c., as to quality and quantity.

Cannabis indica is moving slowly, but, owing to light supplies and strong foreign advices, the market is very firm at former quotations.

Aconite leaves are in light demand at unchanged and, withal, fairly steady prices of 8@9c., as to quantity.

Supplies of matico leaves are still light, in consequence of which the market is firm at 16c.

Supplies of pulsatilla herb are more plentiful and in consequence of this and a quiet market quotations have been reduced to 9@10c., as to quantity.

We have the following correspondence regarding articles in this department:—

Trieste, June 27, 1903.

Horehound herb is a little firmer. There was an increased demand since our last report and the last sales have been effected at the parity of 3¾c. per lb. c. & f. New York.

Sage leaves are unchanged and still to be had at 1½@2c., which price, however, could be shaded on a firm offer. Stocks on hand are considerable and besides this the new crop is approaching.

The first lots of belladonna herb of the new crop have come to hand and have fetched high prices at once. The weather was rather unfavorable during the last time in the gathering districts, and there are rumors that the crop will only be a small one this year.

Roots.

The downward tendency of the market for senega root continues, and while 60c. is quoted for Northwestern root on spot, there would be little difficulty in securing supplies at lower prices. New crop root remains in about the same position as at the time of our last report, with sales in Minneapolis of 5 tons at 51c. and 2 tons at 52c. The bid of 45c., delivered, for July shipment, referred to last week, was not accepted. Onr Minnesota correspondent writes as follows:—

Considerable senega root was received in St. Paul and Minneapolis last week, arrivals from Minnesota and Dakota being about 24,000 lbs. and from Canada about 6,000 lbs., or a total of 30,000 lbs. Sales in Minneapolis of 10,000 lbs. for shipment this week were made at private terms, thought to be about 50c. for freight paid to New York. In St. Paul two tons of prime Minnesota root sold for export at private terms. Prospects are for quite liberal receipts during the next few weeks. The weather is favorable for digging.

The Winnipeg Commercial reports the situation as follows:—

Senega.—Receipts are liberal. All advices from the country indicate that digging has been active and that there are considerable quantities of root to come forward. On the other hand, demand has been better this week, and to-day leading dealers are quoting 48@50c. for clean, dry root, delivered. This is a better price than we quoted last week, but it may be of a very transient character, as the feeling in the trade is that lower prices will prevail, and no one is willing to stock up very heavily at this figure.

The market for doggrass root is dull and easier, but prices show no quotable change from 5¾@6¼c., as to quantity and holder.

Mexican sarsaparilla continues very firm in consequence of extremely light supplies both here and at producing points. There is some demand and holders generally quote 8½c.

Serpentaria is firm in some quarters, where up to 42c. is asked. The article is in liberal supply in the country, however, and can be had there at 38c. Some holders on spot will sell at 40c.

Golden seal is firm and in light supply. Some holders will not release goods below 55c., but others will accept 53c.

Supplies of colombo root continue plentiful, and the market is easy under a slow demand. Nominal quotations are 4½@8c., as to quality and quantity.

Seeds.

Cables report a short crop of coriander seed, and the market here is higher in consequence, quotations having been advanced to 2¼@2½c. for natural and 2⅞@3c. for bleached, as to quantity.

Lobelia seed is in more plentiful supply, which has had the effect of moderating the views of holders, who now quote 42@45c.

Canary seed seems to be a trifle easier, in spite of strong advices from abroad. Sicily is quoted at 3¾@4c. and Smyrna at 3½@3⅝c. A cable from Constantinople on Friday quoted 10s. 9d. We have the following correspondence:—

Constantinople, June 20, 1903.

It is now almost possible to judge more or less correctly the result of this season's canary seed crop. Notwithstanding all that has been said to the contrary, the sowings were, if anything, short of an average. Owing to short crop last year and high prices, peasants very naturally sold the bulk of their crops and when seeding time came found themselves with barely sufficient for their requirements. Owing to the high prices reigning at the time, they were not in a position to buy all that was necessary to allow of their sowing on as large a scale as the high prices warranted. Right up to the middle of May the weather was quite favorable, but after that, hot, south winds and dry weather began to tell on the plants. Toward the end of the month rain came just in time to save the crop from disaster and everything looked promising once again. Unfortunately, however, weather continued from the South, and the blazing sunshine between the showers not only counteracted the effects of rain, but, so to speak, burned the tops of the ears. These various vicissitudes have naturally told on the plants, and the yield, which might under favorable conditions throughout have reached the total of 180,000 sacks, will now be only 130,000 sacks maximum and in all probability this figure will not be touched. Last season Turkey started with a crop of 50,000 sacks, to which must be added about 25,000 sacks of old stock, making a total of 75,000. These, including Morocco crop, estimated at 50,000 sacks, and the stocks all over the world, which we put down at another 50,000 sacks, brought up the total to 175,000 sacks. Against this we have this season an old stock of 5,000 sacks in Turkey, which, added to the new crop which we put down at 130,000 maximum, makes a total of 135,000 sacks in Turkey. If our news is correct, the Morocco crop will only account for from 10,000 to 15,000 sacks, and as the canary seed world is practically deplete of stock, the available supplies for this coming season are not over 150,000 to 160,000 sacks maximum. In other words, the position as regards supplies will be worse than last year. Under the circumstances we look for no decline in prices, but rather the contrary so soon as it becomes generally realized that the Turkish crop is not so large as those who have sold forward at comparatively low prices would have consumers and interested parties believe.

There is more inquiry for mustard seed and the market is firm, particularly as regards German brown, which is held at 3¼c.

The market for celery seed is dull and nominal at former quotations of 9@9¼c., as to quantity.

An easy feeling pervades the market for cardamon seed in sympathy with foreign advices. Bleached is quoted at 35@60c. and decorticated at 37½@40c.

Poppy seed is in slow demand and quotations have declined to 5⅝@5¾c., as to quantity.

Shellac.

There has been no change in the spot situation this week. The market remains very firm, but prices are unaltered, as follows:—D. C., 48@50c.; Diamond I., 43@44c.; V. S. O., 46c.; T. N., 32@33c.; A. C. Garnet, 28@30c.; Button, 35@45c.; Bleached, 30c. Business has been good, but it has been of a jobbing character only, with no speculative trading and, as far as can be learned, no sales between importers. Cables are very strong and London reported an active market, with an advance to 143s. 6d. c. i. f., N. Y. Little or no goods are offering in Calcutta at present. The Mesaba brought some 658 packages

T. N. from London. The shipments during the first half of the month were large, but will not affect the market to any appreciable extent. The figures follow:—

	1903. Cwt.	1902. Cwt.
To the United States	5,500	1,300
To the United Kingdom	3,400	3,800
To the Continent	1,700	900
Total	10,600	6,000

Spices.

Shipments of pepper to the United States from Singapore during the first half of July were moderate, aggregating 175 tons. The spot market for pepper continued firm in sympathy with advices from the East and a fairly active jobbing business was done during the week. Cassia sold well and the market closed firm and higher. Sales were reported of 600 packages on spot, 400 mats China to arrive and 250 mats China on spot, all at full values. Cloves were firm, but unchanged. Nutmegs were unaltered. The shipments to the United States during the first half of July aggregated only 5 tons. Mace was steady and unchanged. During the period from January 1 to July 15 the shipments of black pepper and nutmegs from Singapore and Penang to the United States were as follows:—

	1903. Tons.	1902. Tons.	1901. Tons.
Black pepper	2,465	2,040	3,510
Nutmegs	263	221	274

(Special Cablegram to the Reporter.)

London Closing Prices.

London, July 18, 1903.

Ergot of rye is higher. Shellac is steady. Ipecac is in downward tendency. Quinine is quoted at 10⅞d.

(Special Letter to the Reporter.)

Hamburg Drug Market.

Hamburg, July 7, 1903.

Agar-agar holds its value of 36½@37c. for prime threads. It is remarkable that nearly all arrivals go to arbitration on account of inferior quality.

Camphor is ruling firm and a further advance is expected. Refined, in bells, is now quoted at 69c.

Colocynths are firmly held, in spite of rather large stocks. Holders ask 33c. for Syrian apples, with a maximum of 25 per cent. loose seed.

Gum myrrh continues firm at 18c., with small stocks on hand.

Lycopodium is in good demand and stock is gradually decreasing. Best twice-sifted is now quoted at 53½@54c.

Kola nuts have been in rather important export demand and stocks are nearly exhausted. Prices range from 10@14c.

Ergot of rye is in much better shape. Reports from Spain state that from land which produced 500 bags last year only 100 bags can be taken this year. Nothing is obtainable below 28½@29½c.

The London Public Sales of Gums.

Arabic.—At auction yesterday 589 packages were catalogued, of which about 60 packages found buyers without any particular change in prices. Good, palish, Kurrachee Amrad sold at 24s. 6d.; fair, ambery, pickings at 18s. 6d.; ordinary, small, red, Cawnpore at 14s.; good, bold, Aden chips at 21s.; hard, dark, Madras black at 9@11s.; damaged Australian, 13s.@13s. 6d., and soft, drossy, Senegal at 30s. per cwt.

Olibanum.—Of 274 packages offered, only about 20 sold—good, palish drop at 45s. per cwt.

Acroides.—90 bags block retired at 20s. per cwt.

Grass Tree.—74 bags sold at 4s. 6d.@7s. per cwt.—London Commercial Record.

OPIUM

BARKER BROS.,

SMYRNA, TURKEY.

Hammer & Hirzel,

CONSTANTINOPLE, TURKEY.

Exporters of Opium, Otto of Rose, Gums Tragacanth, Mastic and Scammonium, Salep Root, Geranium Oil, etc.

VANILLIN

ACETIC ANHYDRIDE

THE WARNER CHEMICAL CO.

MANUFACTURING CHEMISTS,

UWCHLAND, CHESTER CO., PA.

ESTABLISHED 1840.

BATTELLE & RENWICK,

163 Front Street, New York

MANUFACTURERS.

Brooklyn Sulphur Works

ROLL BRIMSTONE

FLOUR SULPHUR (Sublimed)

250 and 175 Lb. Barrels.

Niagara Laboratory

REFINED SALTPETRE.

Crystals, Granulated and Powdered.

THE PROCTER & GAMBLE CO

CINCINNATI

PRODUCERS & REFINERS OF

GLYCERINE

Representatives:
New York, Thos. M. Curtius, 5 Platt Street
Philadelphia, O. K. Stevenson, 15 North Front Street
Chicago, Stallman & Fulton Co., 177 Lake street
Boston, Jerome Marble Co., 124 High Street

WM. F. JOBBINS

Successor to JOBBINS & VAN RUYMBEKE

GLYCERINE for Nitro and other purposes

GLAUBER SALTS for Dyes and other purposes

Patentees of J. Van Ruymbeke's NEW PROCESS GLYCERINE DISTILLATION, and Recovery of GLYCERINE AND SALT from Waste Soap Lyes. Also Plants adapted for production and evaporation of Caustic Soda Lyes. Patented Filter Driers for Lime Mud.

Works and Principal Office: AURORA, ILLINOIS. NEW YORK, 81 Fulton Stree

Regd. Cable Addresses, A. B. C. Code (4th Edition) used: "EHRENTOD," Aurora, Ill., New York

BIRD SEEDS

CANARY, HEMP, RAPE AND MILLET.

Original packages, in carload lots or less.

THE ALBERT DICKINSON CO., CHICAGO, ILL.

J. FRITZLIN, Amsterdam

Established 1825.

Exporters of Harlem Oil, Drugs Cinchona Bark, Spices, Seeds, Cacao Ceans, Cacao Butter.

ROGER SCHULTZ & CIE.

MARSEILLES, (France) and TRIESTE, (Austria)

Exporters of Crude Drugs, Medicinal Roots, Flowers, Leaves, Barks and Seeds, Insect Flowers and Dyestuffs.

CHAS. PFIZER & CO.

NEW YORK

Manufacturing Chemists

CREAM TARTAR, Crystals and Powdered, 99½-100%
TARTARIC ACID, CITRIC ACID,
BORAX, Crystals, Powdered and Granulated,
BORACIC ACID, (Pure) Crystals, Granular and Powdered.
ROCHELLE SALTS, SEIDLITZ MIXTURE,
REFINED CAMPHOR

ALSO A FULL LINE OF CHEMICALS FOR MEDICINAL AND TECHNICAL USES

NORTH, EAST, SOUTH, WEST Goes THE OIL, PAINT AND DRUG REPORTER.

W.F. SIMES & SON

JAPAN CAMPHOR

COMPRESSED IN OUNCE BLOCKS.
LASTS TWO SEASONS.

921 REAL ESTATE TRUST BLDG. PHILADELPHIA, PA.

PARKE, DAVIS & CO., - New York

OUR PURE Uncolored P. D. & Co. INSECT POWDER BRAND

INSECT POWDER

Gives Universal Satisfaction.

INDUSTRIAL SECURITIES.

General trade conditions, while showing no change during the past week, are not entirely satisfactory, although comparatively dull trade is expected during midsummer. There appears to be a growing apprehension that the future will witness a decided reaction from the prosperous conditions which have prevailed during the past year. This fear has been fostered during the past week by the disturbances in the financial circles, although as yet trade has not been directly affected. In the lines of trade represented by the Reporter a decided improvement is noted in the demand for chemicals, mainly for prompt shipment to supply current requirements. For drugs the demand is fair for the season and some important price changes are noted. Dyestuffs continue dull for reasons heretofore explained. Oils have been rather quiet, though in mineral oils a fair business is reported. Paints show some improvement, but business is only of Summer proportions. The industrial situation shows no important change, those industries directly affected by strikes are still depressed, with many plants idle, notably in the metal and textiles, while the building trades and those dependent thereon are still in a condition of enforced desuetude. It is confidently expected, however, that operations will be resumed during the coming week, though many building operations which had been contemplated will be deferred owing to the higher cost of material and labor. The labor situation, as viewed at the present writing, shows little change, but there is, apparently, good grounds for the belief which is now prevalent that most of the more important strikes now in force are on the eve of settlement, and it has been semi-officially announced that the strike in the building trades is about at an end and that fully 75,000 skilled workmen will return to work on Monday. Fewer new strikes have been reported during the past week and none of special importance, but there is still considerable unrest in labor circles and strikes are threatened in several trades. These, however, may be averted, as there is a growing disposition to refer the differences to settlement by arbitration. The great agricultural staples tended to a lower range, with, however, some violent price changes due to speculative manipulations. Wheat opened on Monday at 84⅛c. and receded rapidly to 81⅞c., but ranged during the remainder of the week between 81⅛@82⅞c. for September delivery, closing on Friday at 82c. Corn started the week at 57½c., and after selling up to 57¾c., eased off, varying between 56⅛@57⅛c. during the next four days for September delivery and closed on Friday at 56⅜c. Oats sold at 42c. on Monday, receded to 41½c. and later to 41c., closing on Friday at 41c. Cotton has varied between 10.25@10.67c. for September delivery, with the close on Friday at 10.45c. Lard continued its downward course early in the week, but on Wednesday there was an extraordinary movement attributed to speculative operators, who are credited with causing an advance of 1⅛c., the range for September delivery at Chicago on that day being 7.60@8.72½c., while the range for the week was 7.50@8.72½c. There followed a partial reaction, with the close on Friday at 8.12½c. The market for time money was steady early in the week and advanced later, while the supply has been fair and demand moderate. Rates at the close were 4½@5 per cent. for 30 to 60 days, 5@5½ per cent. for 90 days to four months, and 5½@6 per cent. for longer periods. Money on call on the Stock Exchange has ranged from 2 to 4¼ per cent., with the bulk of the business done at 3@3½ per cent. The average rate was 3 per cent. The closing rate on Friday was 2½ per cent. Mercantile paper has been in moderate supply during the past week, with the demand very light. Rates at the close were 5@5½ per cent. for 60 to 90 days' indorsements, 5½@6 per cent. for choice single names having four to six months to run, and 6@6½ per cent. for other grades. The price of bar silver advanced almost daily during the past week and closed steady on Friday at 54@55¼c. for commercial bars and 54¼@55⅝c. for Government assay bars, showing an advance of ⅞c. over the closing prices of last week. Mexican dollars closed at 42½c. bid and 44½c. asked. No further shipments of gold were announced during the week. The market for sterling exchange declined daily, but partially recovered on Friday and closed firm. Rates for actual business at the close were 4.83⅞@4.84 for 60 days, 4.86¼@4.86⅝ for demand and 4.86⅝@4.86¾ for cables. The

In the following table are given the closing quotations Friday night. The market review is complete to Saturday's close.

Name.	Stock Outstanding.	Bonds Outstanding.	Dividends Payable.	Last Dividend.	Bid.	Asked.	Shares Sold This Week.	High and Low, 1902.		High and Low, 1903.	
Am. Agc'l Chemical Co.	$17,215,000	.....	Q.—J.	.....	15	25	.....	31⅝	18⅜	25¾	17
pref. 6%*	18,153,000	.....	A.&O.	Apr. 1, '03, 3%	70	80	.....	91	78¼	83½	74½
Am. Alkali Co.	24,000,000	.....	.....	.....	..	..	.....	..	..	..	..
pref. 8%*	2,400,000	.....	.....	.....	..	..	.....	..	..	..	..
Am. Can Co.	41,233,300	.....	.....	.....	4⅝	5	.....	..	..	..	..
pref. 7%*	41,233,300	.....	.....	.....	41	41½	.....	..	..	..	..
Am. Chicle Co.	6,000,000	.....	Q.—J.	July 10, '03, 1%	110	114	.....	..	..	..	..
pref. 6%*	3,000,000	.....	Q.—J.	July 1, '03, 1½%	88	92	.....	..	..	..	..
Am. Cotton Oil Co.	20,237,100	3,000,000	J.D.	June 1, '03, 2%	34	34½	2,100	57⅜	30½	46¼	33
pref. 6%	10,198,600		J.&D.	June 2, '03, 3%	86	91	350	99½	86	98½	90
Am. Degras Co.	500,000	.....	.....	.....	..	..	.....	..	..	..	..
Am. Glue Co.	800,000	.....	.....	.....	..	..	.....	..	..	..	..
pref. 8%*	1,600,000	.....	F.&A.	Feb. 2, '03, 4%	..	..	.....	..	..	..	..
Am. Linseed Co.	16,750,000	.....	.....	.....	10	12	200	28	12¾	19¾	9¾
pref. 7%	16,750,000	.....	Q.—M.	Sept. 15, '00, 1¾%	32	36	140	58	39½	48½	33
Am. Smelt. & Ref. Co.	50,000,000		J	.....	42¾	43¼	29,345	49⅜	36⅞	52⅞	41
pref. 7%*	50,000,000	973,000	Q.—J.	July 7, '03, 1¾%	91¾	92½	1,810	100⅛	87½	99½	90
Am. Snuff Co.	11,001,700	.....	.....	July 1, '03, 2½%	90	120	100	..	40½	126	99⅞
pref.	12,000,000	.....	Q.—J.	July 1, '03, 1½%	88	91	150	..	85	98⅜	88
Am. Soda Fountain Co.	1,250,000	.....	.....	.....	1	4	.....	..	..	..	..
pref. 6%*	1,250,000	.....	Q.—J.	Nov. 20, '01, 6%	75	85	.....	..	..	..	..
2d pref. 8%*	1,250,000	.....	.....	.....	17½	19	.....	..	..	..	..
Am. Sugar Refining Co.	44,246,100	.....	Q.—J.	July 2, '03, 1¾%	116⅝	116⅞	55,012	135¼	113	134⅜	114⅜
pref. 7%*	44,068,300	.....	Q.	July 2, '03, 1¾%	118⅜	119⅜	345	122	115	123	118
Am. Tobacco Co. 6%	54,500,000		Q.—F.	May 1, '03, 3%	..	..	.....	..	..	..	..
pref. 8%	14,000,000	3,024,490	Q.—F.	Aug. 1, '03, 2%	138	149	300	151½	140	149¼	138
Am. Window Glass	13,000,000	.....	.....	Jan. 20, '03, 1½%	50	..	.....	..	..	..	..
pref. 7%*	4,000,000	.....	M.&S.	Mar. 20, '03, 3½%	..	..	.....	..	..	..	..
Casein Co. of Am., 8%*	5,492,000	.....	Q.—F.	.....	..	10	.....	..	..	..	..
pref. 8%*	1,000,000	.....	Q.—F.	.....	..	80	.....	..	..	..	..
Celluloid Co. 6%	5,925,000	.....	Q.—J.	Apr. 1, '03, 1½%	..	..	.....	..	..	..	..
Chesebrough Mfg. Co.	500,000	.....	Monthly.	.....	450	475	.....	..	..	..	..
Compressed Gas Capsule Co.	13,500,000	.....	.....	.....	..	..	.....	..	..	..	..
pref. 8%	1,500,000	.....	.....	.....	..	..	.....	..	..	..	..
Continental Tobacco Co.	48,844,600	.....	.....	July 2, '03, 4%	..	..	.....	..	..	..	..
pref. 7%	48,846,100	.....	Q.—J.	July 2, '03, 1¾%	106¾	109	110	126½	114	119	106⅞
Con. Stock & Pet. Ex. Mem.	†($1,500)										
Corn Products Co.	44,869,258	.....	Q.—M.	May 1, '03, 1%	28¼	29	5,920	38¼	26⅜	33	27½
pref. 7%*	27,362,750	.....	Q.—J.	July 10, '03, 1¾%	79½	80	2,753	90	70⅝	85¼	78¼
Diamond Match Co.	15,000,000	.....	Q.—M.	June 12, '03, 2½%	132	134	.....	140	130¼	140	132
Distilling Co. of America.	44,546,973			.....	4⅞	5⅛	.....	..	..	..	..
pref. 7%	29,464,318	5,000,000	Q.—J.	Apr. 15, '03, 1%	40	45	.....	..	..	..	..
Dixon Crucible Co.	734,500	.....	Q.—J.	Jan. 15, '03, 1%	..	..	.....	..	..	..	..
Fisheries Co.	532,867	500,000	J.&J.	.....	..	..	.....	..	..	..	..
pref. 7%	2,000,000	.....	Annual.	Jan. 10, '03, 7%	..	..	.....	..	..	..	..
General Chemical Co.	7,405,500	.....	Q.—M.	June 1, '03, 1¾%	65	70	.....	67½	60¼	72	60½
pref. 6%	10,000,000	.....	Q.—J.	July 1, '03, 1½%	98½	100	.....	100	98½	101⅝	98⅝
Glucose Sugar Refining Co.	24,027,300	.....	Q.—M.	Dec. 2, '01, 1%	..	..	.....	..	..	..	..
pref. 7%*	13,638,300	.....	Q.—M.	Dec. 2, '01, 1¾%	..	..	.....	..	..	..	..
Harrison Bros. Co.	1,000,000			.....	..	..	.....	..	..	..	..
pref.	1,500,000	1,300,000	Q.—F.	Aug. 15, '01, 1¾%	..	..	.....	..	..	..	..
Maritime Ex. Mem.	†($55)										
National Lead Co.	14,905,400	.....	.....	Mar. 1, '00, 1%	16½	17	2,235	32	15⅝	29½	15⅛
pref. 7%*	14,904,000	.....	Q.—M.	June 15, '03, 1¾%	83¼	85	120	96	78¼	93	83
National Wall Paper Co.	30,000,000	.....	.....	.....	..	..	.....	..	..	..	..
pref. 8%	3,000,000	.....	.....	.....	..	..	.....	..	..	..	..
New Jersey Zinc Co.	10,000,000	10,000,000	.....	.....	..	..	.....	..	..	..	..
Penn Salt Mfg. Co.	3,000,000	.....	A.&O.	Apr. 15, '03, 6%	..	..	.....	..	..	..	..
Pittsburg Plate Glass Co.	9,850,000	.....	Q.—J.	.....	..	125	.....	..	..	..	..
pref.	150,000	.....	.....	.....	257	..	.....	..	..	..	..
P. Lorillard Co.	3,000,000	.....	.....	.....	..	..	.....	..	..	..	..
pref. 8%*	2,000,000	.....	Q.—J.	Apr. 1, '03, 2%	115	..	.....	..	..	..	..
Planters' Compress Co.	20,000,000	.....	.....	.....	..	..	.....	..	..	..	..
Proctor & Gamble Co.	5,250,000		Q.—F.	Feb. 14, '03, 3%	360	365	.....	..	..	..	..
pref. 8%*	2,250,000	1,000,000	Q.—J.	Apr. 15, '03, 2%	..	..	.....	..	..	..	..
Produce Exchange Membership.	†($375)										
Pure Oil Co.	8,000,000	.....	.....	.....	..	..	.....	..	..	..	..
pref. 6%*	2,000,000	.....	.....	.....	..	..	.....	..	..	..	..
Quicksilver Mining Co.	5,708,700	.....	.....	.....	1	2	.....	4¾	2	2	1⅝
pref 7%	4,291,300	.....	.....	May 8, '03, ½%	7	9	.....	11⅞	8	9	6
Royal Baking Powder Co.	10,000,000	.....	.....	.....	..	..	.....	..	..	..	117½
pref. 6%*	10,000,000	.....	Q.—J.	Mar. 31, '03, 1½%	101	102	.....	..	..	..	101
Southern Cotton Oil Co.	1,000,000	.....	J.&D.	June 15, '03, 4%	..	..	.....	..	..	..	..
Standard Oil Co.	97,500,000	.....	Q.—M.	June 15, '03, 7%	640	645	.....	..	..	690	655
Standard Table Oil Cloth.	4,000,000	.....	.....	.....	..	..	.....	..	..	..	..
pref. 7%*	4,000,000	.....	.....	.....	..	..	.....	..	..	..	..
Stillwell, Bierce & Smith Valle Co.	1,012,100	300,000	.....	.....	..	..	.....	..	..	..	..
U. S. Glass.	3,458,100	.....	.....	.....	..	..	.....	..	..	..	..
pref. 7%	600,000	.....	.....	Mar. 10, '02, 4%	..	..	.....	..	..	..	..
U. S. Leather Co.	62,382,300			.....	8¼	8½	10,030	15	10½	15⅛	7⅝
pref 8%*	62,282,300	5,280,000	Q.—J.	July 1, '03, 1½%	81	81½	9,198	91¼	79⅞	96⅜	78⅝
U. S. Playing Card Co.	3,600,000	.....	Q.—J.	.....	75	78	.....	..	..	..	..
U. S. Printing Co.	3,500,000	.....	A.—M.	.....	74	76¼	.....	..	..	..	..
U. S. Reduction & Refining Co.	5,585,000	.....	Q.—J.	July 1, '03, 1%	29	31	.....	44½	25	35¼	29½
pref. 6%	3,923,300	3,000,000	Q.—J.	July 1, '03, 1½%	47	51	.....	68⅝	57	56	48
U. S. Rubber Co.	23,666,000			Apr. 30, '00, 1%	11⅛	12½	2,970	19⅝	13¾	19⅛	11⅝
pref. 8%	23,525,500	12,000,000	Q.—J.	Jan. 31, '01, 1%	47½	49	950	63¼	49¼	58	46
Union Talc Co.	1,000,000	.....	.....	.....	..	..	.....	..	..	..	..
Virginia-Carolina Chemical Co.	27,984,400		Q.—M.	June 1, '03, 1¼%	46¾	47	8,085	76	54	66⅝	45
pref. 8%*	12,000,000	7,000,000	Q.—J.	July 15, '03, 2%	112¾	113	530	134⅝	120	128½	111½

*Cumulative. †Price of last seat sold.

INTEREST ON DEPOSITS.

The New Jersey Title Guarantee and Trust Company

CAPITAL. - - - - $200,000.00

UNDIVIDED PROFITS. - - - 800,000.00

Receives Deposits Subject to Check and Allows Interest on Daily Balances, Issues Time and Demand Certificates of Deposits Bearing Interest.

IMPORTANT TO RENTERS OF SAFE DEPOSIT BOXES IN NEW YORK.

"THE LEGACY AND INHERITANCE TAX LAW," as enacted under the laws of the State of New York, section 9, chapter 399, of 1892, authorizes city or county officials to examine the contents of Safe Deposit Boxes at the death of renter, in order to determine the amount of tax to be levied on the estate.

Boxes to Rent from $5 to $300 per Annum.

The New Jersey Title Guarantee and Trust Company 83 & 85 MONTGOMERY STREET, JERSEY CITY, N. J.

supply of grain and cotton bills has continued scarce, while the demand was moderate. Rates at the close were 4.83¾@4.84. The Industrials have received a moderate amount of attention, although they were overshadowed by the exciting events which characterized the market during the past week. Naturally they were somewhat affected by the breaks in the general list, but they suffered only in sympathy, there being nothing else to affect this class of securities. Trading was fair. The general list of securities dealt in on the Stock Exchange broke violently at times, followed by partial recoveries, while the transactions were of exceptionally large volume. The close developed more confidence, with prices steady.

Sugar stock was traded in to a fair extent and in the absence of reports or developments was affected by the course of the general market, though on every depression below 116 there was rather free buying. The only reports were as to the demand for the products, the season of most active demand having commenced, and it was claimed that the business was not up to expectations, though no particulars were obtainable. The last sale on Friday was at 116⅞.

The fluctuations during the week have been from 114¾@118, the lowest Wednesday and the highest Monday, closing to-day at 115¾ bid.

Cotton Oil stock was influenced to some extent by the conditions prevailing in the general market and in the absence of any development or feature to affect the stock, the decline was attributed to this. The stock also felt the effect of the improvement on Friday, though bidding was very light. The last sale on Friday was at 34.

The fluctuations during the week have been from 33⅛@35, the lowest Saturday and the highest Monday, closing to-day at 33 bid.

Lead stock showed only light variations, notwithstanding the demoralized conditions which prevailed at times in the general market. There was no news or even gossip. Trading was moderate. The last sale on Friday was at 16½.

The fluctuations during the week have been from 15⅛@16⅛, the lowest Wednesday and the highest Monday, closing to-day at 15¼ bid.

Linseed Oil stock received very little attention and was probably not affected by the conditions which affected the general list. Only a few sales were reported. The last sale reported, on Thursday was at 10.

The fluctuations during the week have been from 10@10½, the lowest Thursday and the highest Tuesday, closing to-day at 10 bid.

Va.-Car. Chemical stock appeared to follow the course of the general market, though there were always partial recoveries from the more severe declines, and on Friday reacted promptly with the improvement in the general list. There was no news; in fact, all interest appeared to be diverted from the Industrials. The last sale on Friday was at 46¾.

The fluctuations during the week have been from 45@51¼, the lowest Wednesday and the highest Monday, closing to-day at 46⅝ bid.

Corn Products stock sold on Monday at 29⅜, but broke on Wednesday to 27½, from which, however, there was recovery above 28, and on Friday to 29, at which the last sale was reported.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

STANDARD OIL CO.

NAPHTHA DEPARTMENT.

Refiners of Naphtha and Gasoline.

Standard Oil Co.'s Red Crown Brand Deodorized Stove Gasoline.

THE QUALITY OF OUR STOVE GASOLINE IS UNEQUALLED. RELIABLE GOODS THAT ALWAYS GIVE SATISFACTION IS AN IMPORTANT FEATURE IN THE SUCCESS AND COMFORT OF USING A

GASOLINE STOVE.

Old or New Process.

Our Facilities are unsurpassed. Our aim, Prompt Attention to the wants of dealers and consumers everywhere and at all times. Don't fail to order RED CROWN BRAND.

Agencies in all the principal cities through the West and South.

Paraffine.

STANDARD OIL COMPANY,

SEAL YOUR JELLY, jam and preserves by pouring a little melted Paraffine on top of each glass and jar. It will harden immediately, and form a covering that will keep the preserves sweet, clean and as soft and fresh at the top as at the bottom. Perfectly pure, tasteless, odorless, air-proof, water-proof, acid-proof, and a protection against vermin and mould. Paraffine is sold in pound packages for household uses at drug, grocery and general stores.

Special Depot, 408 W. 14th Street, **NEW YORK.**

MICA AXLE GREASE

Manufactured By the

STANDARD OIL CO.

Petroleum Pipe Line Statements for June, 1903.

The following table gives the receipts of each company from the wells during the months of May and June, 1903:—

RECEIPTS.

	May.	June.
Cumberland Pipe Line.	29,817.59	53,210.09
Emery Pipe Line.....	27,220.00	27,887.79
Eureka Pipe Line.....	1,051,916.91	1,074,105.52
Macksburg Pipe Line..	460,470.37	469,351.73
National Transit.....	495,628.99	506,283.77
Prod. & Ref. Oil Co....	168,652.32	170,677.39
Southwest Pa. P. L....	266,847.83	270,385.03
Tidewater Pipe Co.....	93,986.78	102,403.13
U. S. Pipe Line.....	4,403.51	4,370.92
Totals	2,598,944.30	2,678,675.37

MONTHLY RECEIPTS.

The following is a comparative statement of the deliveries during each month in the years 1900, 1901, 1902 and 1903:—

	1900.	1901.	1902.	1903.
Jan....	2,836,815	2,934,948	2,559,185	2,621,892
Feb....	2,511,036	2,509,852	2,199,982	2,286,710
March..	2,915,673	2,869,586	2,500,762	2,701,879
April...	2,889,993	2,791,932	2,635,929	2,626,408
May....	3,074,578	2,921,334	2,713,013	2,598,944
June....	3,000,272	2,712,780	2,529,449	2,678,675
July....	3,032,983	2,915,841	2,777,650	.....
Aug....	3,125,114	2,862,228	2,664,141	.....
Sept....	2,920,457	2,585,682	2,727,494	.....
Oct.....	3,196,985	2,755,311	2,791,553	.....
Nov....	2,947,155	2,519,915	2,532,007	.....
Dec.....	3,014,468	2,566,706	2,669,283	.....
Year..	35,486,529	32,496,116	31,360,448	.....
Average	2,957,211	2,745,509	2,613,371	2,585,751

DELIVERIES.

The following exhibits the deliveries from each line during the months of May and June, 1903:—

	May.	June.
Crescent Pipe Line....	252,057.65	170,362.59
Cumberland Pipe Line.	9,986.20	21,796.62
Emery Pipe Line.....	29,102.70	27,299.38
Eureka Pipe Line.....	21,024.17	4,589.55
Macksburg Pipe Line..	15,180.27	10,487.59
National Transit.....	888,350.21	893,654.29
N. Y. Transit Co.....	164,536.50	222,950.76
Prod. & Ref. Oil Co....	193,998.60	180,879.83
Southern Pipe Line....	736,489.12	806,140.89
Southwest Pa. P. L....	69,009.80	86,990.18
Tidewater Pipe Line...	300,588.20	215,245.19
U. S. Pipe Line.....	55,113.04	29,834.91
Totals	2,735,793.46	2,670,231.78

MONTHLY SHIPMENTS.

The following is a comparative statement of the deliveries during each month in the years 1900, 1901, 1902 and 1903:—

	1900.	1901.	1902.	1903.
Jan....	2,887,970	3,135,704	3,013,150	2,885,789
Feb....	2,747,666	2,585,297	2,282,872	2,198,668
March..	2,797,661	2,885,557	2,613,412	2,792,821
April...	2,844,496	2,854,188	2,447,301	2,556,172
May....	2,793,247	3,033,527	3,410,053	2,735,796
June....	2,880,483	2,843,781	2,708,493	2,670,232
July....	2,756,173	3,287,511	2,740,665	.....
Aug....	3,383,582	3,250,421	2,911,251	.....
Sept....	3,031,430	3,075,809	2,792,104	.....
Oct.....	3,002,215	3,244,610	3,218,685	.....
Nov....	3,144,739	3,116,322	2,898,693	.....
Dec....	3,088,358	3,026,982	3,117,782	.....
Year..	35,358,024	36,339,709	34,154,461	.....
Average	2,940,502	3,028,309	2,846,205	2,639,923

NET STOCKS.

The following shows the stock held by each of the pipe line companies at the close of May and June, 1903:—

	May.	June.
Crescent Pipe Line....	116,700.05	145,184.87
Cumberland Pipe Line.	445,329.77	473,571.49
Emery Pipe Line.....	19,744.36	20,332.77
Eureka Pipe Line.....	1,044,849.98	1,021,781.03
Macksburg Pipe Line..	466,793.84	431,269.73
National Transit.....	1,289,734.30	1,451,013.61
N. Y. Transit Co.....	6,420.40	47,574.96
Prod. & Ref. Oil Co...	214,119.37	203,916.93
Southern Pipe Line....	464,814.98	434,079.18
Southwest Pa. P. L...	1,222,357.23	1,048,931.21
Tidewater Pipe Line....	212,177.62	226,467.85
U. S. Pipe Line.....	53,187.41	62,802.76
Totals	5,547,229.31	5,566,926.39

TOTAL NET STOCKS.

The following table exhibits the stock of all pipe lines on hand at the close of each month in 1900, 1901, 1902 and 1903:—

	1900.	1901.	1902.	1903.
Jan....	13,104,500	12,956,099	8,965,706	5,546,388
Feb....	12,875,241	12,880,608	8,880,897	5,639,351
March..	12,026,486	12,865,464	8,828,250	5,560,082
April...	13,063,258	12,705,345	7,996,776	5,646,195
May....	13,335,536	12,579,058	7,299,734	5,547,229
June....	13,450,592	12,466,054	7,108,844	5,566,926
July....	13,729,098	12,099,866	7,156,040	.....
Aug....	13,541,571	11,706,816	6,896,507	.....
Sept....	13,213,778	11,147,875	6,815,799	.....
Oct.....	13,358,401	10,608,822	6,416,556	.....
Nov....	13,110,769	9,978,928	6,087,071	.....
Dec....	13,174,717	9,420,421	5,699,127	.....

OUTSTANDING CERTIFICATES.

The following table exhibits the amount of oil held by the National Transit Company, represented by outstanding certificates and other vouchers, at the close of each month in 1900, 1901, 1902 and 1903:—

	1900.	1901.	1902.	1903.
Jan....	1,020,000	2,461,000	2,481,000	250,000
Feb....	1,051,000	2,845,000	2,481,000	233,000
March..	2,049,000	2,485,000	2,481,000	232,000
April...	2,048,000	2,464,000	1,510,000	233,000
May....	2,046,000	2,464,000	1,519,000	237,000
June....	2,046,000	2,464,000	882,839	173,000
July....	2,081,785	2,453,129	881,278	.....
Aug....	2,114,058	2,459,842	884,458	.....
Sept....	2,130,958	2,462,156	582,320	.....
Oct.....	2,138,070	2,469,153	238,529	.....
Nov....	2,155,485	2,474,058	273,000	.....
Dec....	2,396,494	2,473,580	283,000	.....

NATIONAL TRANSIT COMPANY.

Summary of report of the National Transit Company at the close of business, June 30, 1903:—

Gross stocks	2,318,797.93
Sediment and surplus	867,784.32
Acceptances, etc.....	173,000.00
Credit balances.....	1,278,013.61
Total liabilities.....	1,451,013.61

RECEIPTS.

Runs from wells.....	506,283.77
Other receipts.....	950,279.36
Total receipts.....	1,456,563.13

DELIVERIES.

Regular shipments.....	893,654.29
Delivered to other lines	390,182.82
Total deliveries.....	1,283,837.11

TIDEWATER PIPE COMPANY.

Summary of report of the Tidewater Pipe Line Company at the close of business, June 30, 1903:—

Gross stock	346,053.58
Sediment and surplus	119,585.73
Acceptances	.....
Credit balances.....	226,467.85
Total liabilities.....	226,467.85

RECEIPTS.

Receipts from wells....	102,403.13
Rec'ts from other lines	126,079.50
Total	228,480.63

SHIPMENTS.

Regular	215,245.19

Ohio and Indiana Oils.

The following tables, giving statistics of Ohio and Indiana oils, are not included in the stocks and averages reported above. The first table shows the receipts during each month in the years 1900, 1901, 1902 and 1903:—

MONTHLY RECEIPTS.

	1900.	1901.	1902.	1903.
Jan.....	1,440,005	1,530,051	1,657,429	1,641,859
Feb....	1,251,234	1,309,476	1,385,441	1,409,283
March..	1,453,369,	1,448,370	1,620,737	1,701,058
April...	1,484,426	1,520,480	1,615,285	1,643,885
May....	1,017,384	1,613,343	1,749,472	1,729,383
June...	1,611,327	1,546,404	1,650,721	1,797,537
July....	1,598,752	1,609,402	1,792,235	.....
Aug....	1,053,235	1,616,043	1,776,611	.....
Sept....	1,508,690	1,587,497	1,724,980	.....
Oct.....	1,653,081	1,683,987	1,705,350	.....
Nov....	1,454,311	1,573,170	1,619,089	.....
Dec....	1,654,173	1,483,456	1,628,006	.....
Year..	18,229,978	18,552,770	19,984,363	.....
Average	1,519,165	1,546,064	1,665,364	1,653,984

MONTHLY SHIPMENTS.

The following table is a statement of the shipments during each month of 1900, 1901, 1902 and 1903:—

	1900.	1901.	1902.	1903.
Jan....	1,425,879	1,457,519	1,560,521	2,073,604
Feb....	1,336,918	1,334,700	1,716,820	1,845,381
March..	1,492,489	1,460,009	1,872,115	1,991,423
April...	1,332,498	1,403,650	1,289,535	1,993,908
May....	1,218,527	1,430,531	1,651,531	2,080,010
June....	1,115,051	1,553,488	1,930,518	2,071,015
July....	991,102	1,042,574	1,994,975	.....
Aug....	1,067,160	1,656,021	2,106,452	.....
Sept....	1,325,078	1,508,168	1,984,511	.....
Oct. ...	1,522,805	1,044,794	2,050,044	.....
Nov....	1,420,639	1,340,880	2,037,356	.....
Dec.....	1,539,268	1,562,581	1,896,265	.....
Year..	15,817,611	17,760,515	22,090,471	.....
Average	1,318,134	1,480,043	1,840,873	2,009,172

TOTAL NET STOCKS.

The following gives the amount of the stocks in Ohio oil at the close of each month in 1900, 1901, 1902 and 1903:—

	1900.	1901.	1902.	1903.
Jan..	10,646,120	15,249,598	18,010,335	16,739,754
Feb..	10,668,767	15,360,256	17,824,823	16,489,631
March	10,767,147	15,148,862	17,766,927	16,378,976
April.	11,127,623	13,940,636	18,205,072	16,186,819
May..	11,650,730	16,248,382	18,439,723	16,032,321
June..	12,236,290	16,403,901	18,341,671	15,920,295
July..	13,070,577	16,792,433	18,315,974	.....
Aug..	13,483,013	16,885,807	18,153,120	.....
Sept..	14,282,143	17,136,195	18,025,986	.....
Oct...	14,678,274	17,362,717	17,833,537	.....
Nov..	14,900,403	17,570,319	17,565,114	.....
Dec...	14,988,928	17,760,306	17,306,426	.....

Buckeye Pipe Line Company.

Summary of the report of the Buckeye and Indiana pipe line companies at the close of business, June 30, 1903:—

Gross stock	19,317,311.00
Sediment, etc	3,397,016.46
Net stocks	15,920,294.54

LIABILITIES.

Outstanding acceptances, etc.....	4,500,000.00
Credit balances.....	11,420,294.54
Total	15,920,294.54

RECEIPTS.

Runs from wells.....	1,797,537.48
Receipts from other lines.....	161,451.08
Total	1,958,988.56

SHIPMENTS.

Regular	2,071,014.83
To other lines.....	.....
Total	2,071,014.83

Franklin Pipe Line Company.

The following table shows the runs during each month for the past five years of heavy oil in the Franklin district:—

MONTHLY RUNS.

	1899.	1900.	1901.	1902.	1903.
January....	2,756	4,394	4,006	3,195	2,833
February....	4,203	2,734	1,827	3,265	2,930
March.....	5,941	5,365	5,380	3,396	4,543
April.....	4,197	5,616	3,989	4,501	3,729
May.....	6,264	4,300	4,795	3,936	3,477
June.....	4,089	4,231	4,042	3,754	4,208
July.....	4,569	4,581	4,133	4,163	.....
August.....	3,980	3,920	3,870	3,345	.....
September...	4,682	4,458	4,641	4,232	.....
October.....	3,983	3,687	4,055	3,579	.....
November...	4,829	4,212	3,460	3,510	.....
December...	3,356	3,909	3,809	2,863	.....
Year	63,309	51,407	48,107	43,739	.....
Average.....	4,442	4,284	4,009	3,645	3,620

MONTHLY SHIPMENTS.

In the following table are given the monthly shipments from January 1, 1899, to date:—

	1899.	1900.	1901.	1902.	1903.
January.....	9,037	10,755	7,262	5,348	11,402
February....	5,724	5,418	9,726	3,212	6,853
March.....	9	1,597	871	65	2,090
April.....	1,636	551	665	445	289
May.....	725	931	726	.....	289
June.....	.....	1,048	364	.....	889
July.....	.....	737	434	588	.....
August.....	711	2,515	12,995	479	.....
September...	4,332	3,207	927	4,679	.....
October.....	2,555	2,849	4,249	5,136	.....
November...	6,787	7,928	7,995	7,133	.....
December...	7,332	6,156	11,042	9,143	.....
Year	39,848	32,682	57,214	36,225	.....
Average....	3,331	3,640	4,768	3,019	3,637

TOTAL NET STOCKS.

The net stocks at the end of each month since January 1, 1899, were as follows:—

	1899.	1900.	1901.	1902.	1903.
January....	19,000	32,011	42,840	34,833	33,928
February...	18,085	29,427	34,912	32,886	30,004
March.....	23,918	33,094	39,451	36,217	32,457
April.....	26,479	38,160	42,775	40,274	35,897
May.....	32,019	41,528	46,814	44,209	39,086
June.....	36,677	47,711	50,522	47,963	42,395
July.....	41,247	48,565	34,220	51,538	.....
August.8..	41,465	49,970	45,195	54,465	.....
September.	44,815	51,222	48,909	53,958	.....
October....	44,297	52,059	48,714	52,400	.....
November..	43,349	48,343	44,219	48,777	.....
December..	38,373	46,096	36,986	42,497	.....

Petroleum Exports for June.

O. P. Austin, chief of the Bureau of Statistics, submits the following statements of the exports of mineral oils from the United States during the month of June, 1903, and during the twelve months ended June 30, 1903, to which we add tables giving the quantities exported each month since January, 1901, as also totals and monthly average exports:—

CRUDE OIL.

	Gallons.	Dollars.
June, 1903.....	8,456,362	471,512
June, 1902.....	15,054,676	716,259
Twelve months, 1903.....	132,304,908	6,191,820
Twelve months, 1902.....	132,996,408	6,076,425

	1901.	1902.	1903.
January.....	10,504,293	11,274,800	8,866,008
February.....	8,090,026	7,329,424	8,907,616
March.....	12,236,594	15,651,932	10,205,(0)
April.....	11,427,520	8,166,769	5,963,069
May.....	11,837,546	11,525,352	13,824,696
June.....	8,786,292	15,054,676	8,456,362
July.....	10,532,667	11,585,906	.....
August.....	10,163,893	10,492,477	.....
September.....	10,921,493	13,200,656	.....
October.....	7,325,042	13,300,498	.....
November.....	13,501,548	9,903,493	.....
December.....	11,458,803	16,570,370	.....
Year.....	126,925,717	144,065,436	.....
Average.....	10,577,143	12,005,453	9,370,458

NAPHTHAS.

	Gallons.	Dollars.
June, 1903.....	1,143,582	152,042
June, 1902.....	2,136,601	106,622
Twelve months, 1903.....	11,368,660	1,060,847
Twelve months, 1902.....	22,179,425	1,545,092

	1901.	1902.	1903.
January.....	2,892,021	769,753	596,903
February.....	1,811,310	1,022,326	628,844
March.....	114,413	2,790,232	326,865
April.....	2,371,990	1,856,038	1,350,309
May.....	1,137,983	2,494,358	343,194
June.....	978,137	2,136,601	1,143,582
July.....	2,118,722	500,184	.....
August.....	1,496,858	1,903,611	.....
September.....	1,469,815	431,002	.....
October.....	1,773,322	1,720,923	.....
November.....	2,444,416	2,188,152	.....
December.....	1,779,984	688,790	.....
Year.....	20,715,971	18,530,970	.....
Average.....	1,726,331	1,544 218	731,616

ILLUMINATING OILS.

	Gallons.	Dollars.
June, 1903.....	54,842,037	3,760,557
June, 1902.....	69,724,315	4,185,941
Twelve months, 1903.....	683,868,414	45,857,969
Twelve months, 1902.....	831,393,106	52,547,254

	1901.	1902.	1903.
January.....	62,457,332	73,075,811	41,673,849
February.....	47,768,340	49,250,820	48,053,801
March.....	50,486,479	61,825,929	43,535,587
April.....	64,704,100	65,669,123	60,483,240
May.....	76,230,843	64,987,139	53,080,343
June.....	68,868,890	69,724,315	54,842,037
July.....	77,652,234	63,665,211	.....
August.....	72,864,132	62,208,052	.....
September.....	80,213,782	56,797,779	.....
October.....	71,359,374	73,473,314	.....
November.....	70,474,607	58,314,794	.....
December.....	74,205,731	66,357,879	.....
Year.....	817,375,944	765,911,987	.....
Average.....	68,114,662	63,825,999	50,278,143

LUBRICATING OILS.

	Gallons.	Dollars.
June, 1902.....	7,478,344	822,200
June, 1903.....	5,122,810	697,417
Twelve months, 1903.....	91,096,972	11,462,371
Twelve months, 1902.....	73,955,746	9,925,444

	1901.	1902.	1903.
January.....	5,647,785	6,041,758	7,004,639
February.....	5,028,109	5,735 945	8,318,200
March.....	5,986,587	5,790,492	8,719,311
April.....	7,006,832	7,440,352	8,972,738
May.....	6,896,906	6,731,124	8,232,493
June.....	5,371,694	5,122,810	7,478,344
July.....	5,170,197	7,485,965	.....
August.....	5,903,475	7,551,502	.....
September.....	6,154,065	6,769,866	.....
October.....	7,449,965	6,993,737	.....
November.....	6,192,194	6,167,396	.....
December.....	6,223,369	8,102,162	.....
Year.....	73,031,177	79,933,109	.....
Average.....	6,085,931	6,661,092	8,120,971

RESIDUUM.

	Gallons.	Dollars.
June, 1903.....	91,770	2,373
June, 1902.....	3,972,610	64,452
Twelve months, 1903.....	22,389,382	545,296
Twelve months, 1902.....	29,844,215	854,394

	1901.	1902.	1903.
January.....	4,080,320	2,528,820	1,586
February.....	1,911,882	2,023,644	58,800
March.....	5,361,846	1,373,708	45,864
April.....	1,630,146	4,700,919	654,738
May.....	1,333,290	2,898,714	72,030
June.....	367,332	3,972,610	91,770
July.....	1,939,140	1,798,434	.....
August.....	2,393,214	5,949,801	.....
September.....	2,616,710	3,006,796	.....
October.....	1,569,102	3,444,169	.....
November.....	1,394,442	4,366,278	.....
December.....	2,433,102	873,086	.....
Year.....	26,980,616	38,236,974	.....
Average.....	2,248,385	3,186,414	154,133

TOTAL EXPORTS.

	Gallons.	Dollars.
June, 1903.....	72,012,095	5,208,684
June, 1902.....	96,011,012	5,770,691
Twelve months, 1903...	941,028,836	65,118,303
Twelve months, 1902...	1,090,368,900	70,948,669

	1901.	1902.	1903.
January.....	85,531,751	93,690,951	58,143,049
February...	64,609,667	65,362,168	65,967,261
March.....	74,485,910	87,432,293	62,832,628
April.....	87,140,597	87,833,201	77,424,094
May.....	97,486,567	88,636,987	75,552,756
June.....	86,372,345	96,011,012	72,012,095
July.....	97,413,060	85,035,700	.....
August.....	92,821,602	88,105,443	.....
September..	101,402,865	80,826,090	.....
October....	89,476,865	98,944,640	.....
November..	94,097,207	80,940,103	.....
December..	96,190,989	92,592,287	.....
Year.....	1,065,029,425	1,046,678,476	.....
Average...	88,752,452	87,223,200	68,055,314

Exports by Customs Districts.

CRUDE OIL.

Districts.	June, 1903.	June, 1902.
Baltimore	.....	.....
Boston & Charlestown..	.....	.....
Delaware	7,100,090	9,858,972
New York.....	.....	.....
Philadelphia	1,356,272	5,195,704
Galveston	.....	.....
Totals, gals.....	8,456,362	15,054,676
Districts.	12 mos.	12 mos.
Baltimore	.....	.....
Boston & Charlestown..	5,000	.....
Delaware	96,972,555	92,939,755
New York.....	388.753	917,292
Philadelphia	18,549,867	30,144,958
Galveston	16,388,733	8,994,403
Totals, gals.....	132,304,908	132,996,408

NAPHTHAS.

Districts.	June, 1903.	June, 1902.
Baltimore	750	.....
Boston & Charlestown..	.....	.....
Delaware	.....	.....
New York.....	1,137,902	651,080
Philadelphia	4,930	1,485,521
Galveston	.....	.....
Totals, gals.....	1,143,582	2,136,601
Districts.	12 mos.	12 mos.
Baltimore	1,800	.....
Boston & Charlestown..	.....	1,650
Delaware	13,092	1,290
New York.....	7,812,015	12,063,349
Philadelphia	3,541,753	9,813,804
Galveston	.....	299,272
Totals, gals.....	11,368,660	22,179,425

ILLUMINATING OILS.

Districts.	June, 1903.	June, 1902.
Baltimore	1,444,880	3,635,620
Boston & Charlestown..	57,966	14.229
Delaware	41,813	1,500
New York.....	24,872,319	40.292.808
Philadelphia	28,425,059	25,780,158
Galveston	.....	.....
Totals, gals.....	54,842,037	69,724,315
Districts.	12 mos.	12 mos.
Baltimore	32,930,861	41,935,768
Boston & Charlestown..	626,080	470,132
Delaware	51,575	4.500
New York.....	390,049,648	509,584,695
Philadelphia	256,608,672	277,900,028
Galveston	3,601,578	1,497,983
Totals, gals.....	683,868,414	831,393,106

LUBRICATING OILS.

Districts.	June, 1903.	June, 1902.
Baltimore	129,434	69,050
Boston & Charlestown..	6,672	8,195
Delaware	.....	.....
New York.....	5,552,890	3,682,908
Philadelphia	1,789,348	1,362,657
Galveston	.....	.....
Totals, gals.....	7,478,344	5,122,810
Districts.	12 mos.	12 mos.
Baltimore	1,679,216	780,122
Boston & Charlestown..	123,030	140,985
Delaware	.....	.....
New York.....	61,610,898	51,713,401
Philadelphia	27,665,263	21,321,188
Galveston	565	50
Totals, gals.....	91,096,972	73,955,746

RESIDUUM.

Districts.	June, 1903.	June, 1902.
Baltimore	.....	.....
Boston & Charlestown..	.....	.....
Delaware	.....	.....
New York.....	... .	1,260
Philadelphia	91,770	1,681,092
Galveston	.....	2,290,258
Totals, gals.....	91,770	3,972,610
Districts.	12 mos.	12 mos.
Baltimore	.....	.....
Boston & Charlestown..	.....	47,090
Delaware	.....	.....
New York.....	7,734,412	4,088,798
Philadelphia	12,792,506	21,982,296
Galveston	1,862,464	3,725,131
Totals, gals.....	22,389,382	29,844,215

TOTAL EXPORTS.

Districts.	June, 1903.	June, 1902.
Baltimore	1,575,064	3,704,670
Boston & Charlestown..	64,638	22,424
Delaware	7,141,903	9,860,472
New York.....	31,563,111	44,628,056
Philadelphia	31,667,379	35,505,132
Galveston	.....	2,290,258
Totals, gals.....	72,012,095	96,011,012
Districts.	12 mos.	12 mos.
Baltimore	34,629,877	42,715,890
Boston & Charlestown..	754,110	660,757
Delaware	97,037,222	92,945,545
New York.....	467,595,726	578,367,535
Philadelphia	319,158,061	361,162,334
Galveston	21,853,340	14,516,839
Totals, gals.....	941,028,836	1,090,368,900

IMPORTS ENTERED AT NEW YORK FOR CONSUMPTION.

Week ending July 17.

ACID, BENZIOC—25 cs, 3,603 lbs, H A Metz & Co, Noordam, Rotterdam
50 cks, 6,529 lbs, H A Metz & Co, Noordam, Rotterdam
4 cks, Schoellkopf, H & H Co, Minnehaha, London
CARBOLIC—3 dms, 1,848 lbs, Schieffelin & Co, Br Princess, Antwerp
20 cs, 2,934 lbs, White Tar Co, Br Princess, Antwerp
25 dms, Lehn & Fink, Victorian, L'pool
OXALIC—15 cks, 11,390 lbs, Chemical Imp & Mfg Co, Zeeland, Antwerp
15 cks, 13,764 lbs, Kuttroff, Pickhardt & Co, Patricia, Hamburg
PHOS—30 cs, Roessler & H Chem Co, Bremen, Bremen
PICRIC—15 pkgs, 3,120 lbs, Schoellkopf, H & H Co, Laurentian, Glasgow
ALBUMEN, BLOOD—46 bbls, 22,178 lbs, C Morningstar & Co, Patricia, Hamburg
EGG—29 cs, 2,976 lbs, Zinkeisen & Co, Pennsylvania, Hamburg
5 cs, 551 lbs, Zinkeisen & Co, La Touraine, Havre
49 cs, 6,984 lbs, A Klipstein & Co, Coastwise, Ogdensburg
20 cs, 2,379 lbs, A Klipstein & Co, Coastwise, Yokohama
ALIZARINE—20 bbls, 10,164 lbs, H A Metz, Noordam, Rotterdam
10 kegs, Farb of Elberfeld Co, Zeeland, Antwerp
5 cs, Farb of Elberfeld Co, Zeeland, Ant
30 cks, Kuttroff, P & Co, Noordam, R'dam
15 cks, Kuttroff, P & Co, Zeeland, Ant
ASS'T—30 bbls, 1,489 gals, C A Johnson & Co, Bovic, Liverpool
AMMONIA, CARB—15 cks, 6,160 lbs, J L & D S Riker, Bovic, Liverpool
MURI—71 cks, 23,346 lbs, A Klipstein & Co, Zeeland, Antwerp
ANILINE COLORS—4 cks, C Bischoff & Co, Noordam, Rotterdam
106 cks, H A Metz & Co, Noordam, R'dam
13 bbls, Schoellkopf, H & H Co, Zeeland, Antwerp
18 cks, C Bischoff & Co, Zeeland, Ant
29 kegs, Farb of Elberfeld Co, Zeeland, Antwerp
9 cs, Farb of Elberfeld Co, Zeeland, Ant
27 cks, Farb of Elberfeld Co, Zeeland, Antwerp
24 pkgs, R Holliday & Sons, Bovic, L'pool
78 cks, Hensel, B & L, Noordam, R'dam
28 dms, Sykes & Street, Noordam, R'dam
95 cks, Cassella Co, Noordam, R'dam
86 cks, Kuttroff, Pickhardt & Co, Noordam, Rotterdam
8 cks, New York & B Dyewood Co, Zeeland, Antwerp
16 cks, Farb of Elberfeld Co, Zeeland, Antwerp
2 cks, A de Ronde & Co, Zeeland, Ant
1 ck, Geisenheimer & Co, Zeeland, Ant
18 cks, J J Keller & Co, Zeeland, Ant
73 cks, A Klipstein & Co, Zeeland, Ant
7½ cks, Kuttroff, P & Co, Zeeland, Ant
9 cks, J Campbell & Co, Noordam, R'dam
12 cks, C Bischoff & Co, Bremen, Bremen
46 cks, Berlin Aniline Works, Patricia, Hamburg
2 cs, J Campbell & Co, Patricia, H'b'g
OIL—31 dms, Sykes & Street, Minnehaha, London
3 dms, 3,821 lbs, Berlin Aniline Wks, Patricia, Hamburg
SALT—39 bbls, 22,583 lbs, Schoellkopf, H & H Co, Zeeland, Antwerp
72 cks, 46,296 lbs, C Bischoff & Co, Zeeland, Antwerp
2 cks, 1,364 lbs, R Holliday & Sons, Bovic, Liverpool
11 cks, 4,400 lbs, Kuttroff, Pickhardt & Co, Noordam, Rotterdam
74 cks, 25,671 lbs, Berlin Aniline Wks, Patricia, Hamburg
ARCHIL—12 cks, J Campbell & Co, Minnehaha, London
ARGOLS—22 cks, 14,548 lbs, C. Pfizer & Co, Alberto Trevis, Messina
36 cks, 39,432 lbs, Tartar Chemical Co., Patria, Oporto
810 cks, 168,055 lbs, Tartar Chemical Co, Patria, Oporto
336 cks, 188,434 lbs, Tartar Chemical Co, Alberto Trevis, Messina
250 cks, 55,825 lbs, Tartar Chemical Co, Dinnamare, Messina
60 cks, 68,112 lbs, Tartar Chemical Co, Trojan Prince, Naples
53 cks, 21,210 lbs, Tartar Chemical Co, Calabria, Leghorn
547 bgs, 142,993 lbs, Tartar Chemical Co, Citta di Napoli, Naples
224 bgs, 62,066 lbs, C Pfizer & Co, Calabria, Marseilles
199 bgs, 53,404 lbs, C Pfizer & Co, Calabria, Marseilles
361 bgs, 87,607 lbs, Tartar Chemical Co, Calabria, Marseilles
263 bgs, 52,002 lbs, Tartar Chemical Co, Pocahontas, Bari
ARSENIC—100 cks, Roessler & H Chemical Co, Patricia, Hamburg
BALSAM—1 tank, Dodge & Olcott, Benedict, Para
4 cs, Mecke & Co, Adirondack, Pto Colombia
14 cs, McKesson & Robbins, Adirondack, Pto Colombia
BARIUM, BINOXIDE—13 cks, 8,960 lbs, A Penchot, Noordam, Rotterdam
BARYTES—250 bgs, 55,880 lbs, Gabriel Schall, Noordam, Rotterdam
381 pkgs, 83,189 lbs, Gabriel Schall, Bremen, Bremen
SULPH—1,012 bgs, 99 tons, Hammill & Gillespie, Noordam, Rotterdam
BERLIN BLUE—15 cks, 5,443 lbs, H Kohnstamm & Co, Noordam, Rotterdam
BENZOLE—54 cks, 33,068 lbs, Schoellkopf H & H Co, Nauplia, Stettin
BLANC FIXE—80 bbls, 53,944 lbs, J W Hampton, Jr, & Co, Patricia, Hamburg
BLEACHING POWDER—83 cks, 113,354 lbs, J L & D S Riker, Brooklyn City, Bristol
79 cks, 13,475 lbs, J L & D S Riker, Bovic, Liverpool
36 cks, 33,279 lbs, A Klipstein & Co, Zeeland, Antwerp
BLEACHERS' BLUE—3 bbls, A de Ronde & Co, Bovic, Liverpool
BRIGHT RED—10 cks, G A & E Meyer, Hindoo, Hull
BRISTLES—12 cs, 1,600 lbs, Wilkins Bros, Manitou, London
18 cs, 2,391 lbs, E & H Levy, New York, Southampton
7 pkgs, 1,504 lbs, Wells-Fargo & Co, New York, Southampton
BRONZE POWDER—5 cs, 2,300 lbs, Hensel, B & L, Bremen, Bremen
8 cs, 3,350 lbs, Gerstendorfer Bros, Bremen, Bremen
1 cs, 785 lbs, R F Lang, Bremen, Bremen
3 cs, 1,150 lbs, J Marsching & Co, Bremen, Bremen
2 cs, 1,000 lbs, O Schlegel, Bremen, Bremen
19 cs, 9,520 lbs, L Uhlfelder, Bremen, Bremen
17 cs, 4,300 lbs, Fuchs & Lang Mfg Co, Bremen, Bremen
3 cs, 1,000 lbs, Isaacs Vought & Co, Bremen, Bremen
BUCHU LEAVES—6 bls, 1,840 lbs, G Wyast, New York, London
CAFFEINE—2 cs, 200 lbs, Schoellkopf, H & H Co, Minnehaha, London
CALAMUS ROOT—1 cs, Lehn & Fink, Patricia, Hamburg
CALOMEL—10 cs, 500 lbs, Schoellkopf, H & H Co, Minnehaha, London
CARDAMOMS—21 cs, 1,999 lbs, A U Andrus & Co, New York, London
CARAWAY SEED—100 bgs, 11,000 lbs, J D Nordlinger, Ryndam, Rotterdam
200 bgs, 22,000 lbs, Levy & Levis Co, Noordam, Rotterdam
CASSIA—114 bls, 5,832 lbs, D P Cruikshank, Noordam, Rotterdam
19 bls, R Braus & Co, Indiana, Singapore
FISTULA—15 bskts, McKesson & Robbins, Noordam, Rotterdam
CASTOR SEED—1,655 bgs, H J Baker & Bro, Manitou, London
CHALK ,PRECIP—18 cks, 16,240 lbs, Parke, Davis & Co, Minnehaha, London
CHAMOMILES—14 bls, 3,335 lbs, Stallman-Fulton Co, Bremen, Bremen
CHEMICAL, COMP—100 carboys, Merck & Co, Coatswise, Boston
1 cks, C B Leighton, Minnehaha, London
13 cs, E Levi, Bremen, Bremen
43 pkgs, Merck & Co, Noordam, R'dam
10 dms, 7,800 lbs, Kuttroff, P & Co, Noordam, Rotterdam
10 dms, Kuttroff, P & Co, Zeeland, Ant
22 cs, Fries Bros, Noordam, R'dam
PREP—5 cs, Farb of Elberfeld Co, Zeeland, Antwerp
35 cks, Roessler & H Chem Co, Noordam, Rotterdam
28 cs, Schoellkopf, H & H Co, Zeeland, Antwerp
5 cks, Roessler & H Chem Co, Patricia, Hamburg
3 cs, H A Metz & Co, Patricia, H'burg
4 demj, C Bischoff & Co, Patricia, H'burg
40 cs, Schering & Glatz, Patricia, H'burg
2 cs, Lehn & Fink, Patricia, H'burg
5 cs, Lehn & Fink, Patricia, H'burg
SALT—26 cks, A Klipstein & Co, Lucania, Liverpool
36 cks, A Klipstein & Co, Zeeland, Ant
4 cks, A Klipstein & Co, Bovic, Lpool
9 cs, R F Downing & Co, Patricia, H'burg
30 cs, Lehn & Fink, Philadelphia, London
CHINA CLAY—150 tons, Moore & Munger, Arabic, Liverpool
32 tons, 16 tons, J W Coulston & Co, Bovic, Liverpool
10 cks, 5 tons, A Klipstein & Co, Bovic, Liverpool
150 cks, 75 tons, J Knight & Co, Bovic, Liverpool
CINCHONA BARK—107 bls, 18,035 lbs, G W Sheldon & Co, Ryndam, Rotterdam
686 bls, 136,536 lbs, McKesson & Robbins, Noordam, Rotterdam
CINNAMON—100 bls, 9,903 lbs, R Crooks & Co, Hohenfels, Colombo
CITRAL—5 cs, Ungerer & Co, La Lorraine, Havre
COAL TAR PREP—1 ck, C Bischoff & Co, Noordam, Rotterdam
61 pkgs, H A Metz & Co, Patricia, H'burg
20 cks, Hensel, B & L, Patricia, H'burg
COBALT, OXIDE—5 cs, 500 lbs, C Cooper & Co, Georgia, Liverpool
5 cs, 1,000 lbs, Hammill & Gillespie, Wells City, Bristol
COCA LEAVES—235 bls, 11,172 lbs, W R Grace & Co, Seguranca, Colon
209 bls, 2,387 lbs, F Probst & Co, Seguranca, Colon
26 bls, 2,389 lbs, Scheiffelin & Co, Seguranca, Colon
361 bls, 52,780 lbs, McKesson & Robbins, Seguranca, Colon
COCOA BUTTER—50 cs, 11,200 lbs, T M Duche & Sons, Minnehaha, London
COLCOTHAR—13 bbls, Hemingway & Co, Minnehaha, London
COLOCYNTH—1 cs, 338 lbs, Scheiffelin & Co, Patricia, Hamburg
COLORS—2 cks, Whyte Bros, Georgia, L'pool
2 cs, J Marsching & Co, La Touraine, Havre
1 cs, G A & E Meyer, La Touraine, Havre
3 cs, Favor, Ruhl & Co, New York, London
1 cs, Favor, Ruhl & Co, La Touraine, Havre
28 cs, A W Smith, Noordam, R'dam
29 cs, J W Coulston & Co, Zeeland, Ant
4 cks, C Wix & Co, Pennsylvania, H'b'g
33 cks, J W Coulston & Co, Bremen, Bremen
4 cs, J Marsching & Co, Bremen, Bremen
3 cs, J Marsching & Co, Bremen, Bremen
65 cks, Gabriel & Schall, Bremen, Bremen
35 pkgs, A Keppelmann, Patricia, H'burg
4 cks, Tock Bros, Minnehaha, London
10 cks, J W Coulston & Co, Wells City, Bristol
COPPER OXIDE—4 cks, Roessler & H Chem Co, Noordam, Rotterdam
CORKWOOD—25 pkgs, S Goetschel & Co, Br Princess, Antwerp
CREOSOTE—299 bbls, Schoellkopf, H & H Co, Numidian, Liverpool
CUDBEAR—1 ck, J Campbell & Co, Minnehaha, London
CUTCH—100 cs, 8,688 lbs, H M Rau, Manitou, London
DRUGS—2 cs, 325 lbs, Dodge & Olcott, Benedict, Para
5 pkgs, 420 lbs, Peek & Velsor, New York, London
5 cs, Bickels & Techow, Patricia, H'b'g
4 cs, Lehn & Fink, Patricia, Hbg
4 cs. Lehn & Fink, Calabria, Marseilles
DUTCH METAL CLIPPINGS—8 cs, Fuchs & Lang Mfg Co, Bremen, Bremen
DYEWOOD EXT—40 cks, 20,730 lbs, Sykes & Street, La Touraine, Havre
EGG YOLK—10 cs, 1,694 lbs, Zinkeisen & Co, Zeeland, Antwerp
ERGOT—26 bgs, 3,113 lbs, Parke, Davis & Co, Patricia, Hbg
24 bgs, 3,358 lbs, A U Andrus & Co, Patricia, Hbg
14 bgs, Lehn & Fink, Patricia, Hbg
FULLERS EARTH—1,050 bgs, 105 tons, Hammill & Gillespie, Minnehaha, London
FUSTIC, EXT—25 cks, 13,348 lbs, J Campbell & Co., Arabic, L'pool
GALLS—1 bl, Eimer & Amend, Pocahontas, Trieste
GAMBIER—1,020 bls, 223,440 lbs, J W Phyfe & Co, Indrani, Singapore
1,995 bls, 447,522 lbs, L Littlejohn & Co, Indrani, Singapore
1,007 bls, 210,900 lbs, D A Shaw & Co, Indrani, Singapore
1,526 bls, 336,000 lbs, W R Russel & Co, Indrani, Singapore
514 bls, 112,000 lbs, J H Recknagel & Son, Indrani, Singapore
1,501 bls, 336,000 lbs, Hoople & Androvette Indrani, Singapore
GINGER—28 bbls, J E Kerr & Co, Erica, Jamaica
105 bbls, C Wessels & Bro, Erica, Jamaica
28 bbls, Macy & Dunham, Erica, Jamaica
GLASS, CYLINDER—12 cs, Bendit, Drey & Co, Noordam, R'dam
5 cs, Zahn & Bowley, Noordam, R'dam
15 cs, Semon, Bache & Co, Noordam, Rdam
182 cs, L Popper & Son, Bremen, Bremen
PLATE—11 cs, J Kahn, Zeeland, Antwerp
18 cs, Bendit, Drey & Co, Noordam, Rdam
23 cs, Semon, Bache & Co, Br Princess, Antwerp
3 cs, Van Horne, Griffin & Co, Br Princess, Antwerp
WINDOW—375 cs, 27,200 lbs, G W Sheldon & Co, Finland, Antwerp
60 cs, T W Morris, Zeeland, Antwerp
1,720 cs, Van Horne, Griffin & Co, Br Princess, Antwerp
60 cs, W H Dumont, Zeeland, Antwerp
1,275 cs, Pittsburg Plate Glass Co, Zeeland, Antwerp
1,371 cs, Semon, Bache & Co, Br Princess, Antwerp
35 cs, F L Kramer, Br Princess Antwerp
GLUE—4 cks, 2,139 lbs, Milligan & H Glue Co, New York, London
73 bls, 8,176 lbs, Milligan & H Glue Co, Zeeland, Antwerp
10 cs, 6,762 lbs, A Holthusen, Patricia, Hbg
GLYCERINE—46 dms, 53,130 lbs, Marx & Rawolle, Manitou, London
10 dms, 13,085 lbs, J Munroe & Co, Br Princess, Antwerp
21 dms, 21,607 lbs, J Munroe & Co, Noordam, R'dam
90 dms, 99,514 lbs, Marx & Rawolle, Trojan Prince, Genoa
97 dms, 106,700 lbs, Marx & Rawolle, Minnehaha, London
159 dms, 149,360 lbs, Alpers & Mott, Calabria, Marseilles
30 dms, 32,846 lbs, Alpers & Mott, Patricia, Hbg
REFINED—20 crates, 3,663 lbs, Schering & Glatz, Patricia, Hbg
GREASE—20 cks, A de Ronde & Co, Bovic, L'pool
GLUE—107 cks, 13,045 lbs, T M Duche & Son, Arabic, Liverpool
GUM—5 cks, Schieffelin & Co, Minnehaha, London
4 cs, Eimer & Amend, Pocahontas, Trieste
ANIMI—5 cs, W H Scheel, New York, London
ARABIC—51 cs, 11,658 lbs, Parke, Davis & Co, New York, London
500 lbs, Thurston & Braidich, Liguria, Naples
100 lbs, Thurston & Braidich, Aurania, Liverpool
ASAFOETIDA—13 cs, Parke, Davis & Co, Minnehaha, London
CHICLE—7 bls, 700 lbs, E Steiger & Co, Esperanza, Frontera
COPAL—140 pkgs, 30,088 lbs, J Meyer & Son, Afridi, Singapore
457 pkgs, 88,605 lbs, J H Recknagel & Son, Afridi, Singapore
341 pkgs, 44,550 lbs, D A Shaw & Co, Indrani, Singapore
340 pkgs, Paterson, Boardman & Co, Indrani, Singapore
413 pkgs, R Braus & Co, Indrani, Singapore
DAMAR—40 cs, 8,106 lbs, E Hills Sons & Co, Afridi, Singapore
165 cs, 21,080 lbs, D A Shaw & Co, Indrani, Singapore
100 cs, 13,300 lbs, S Winterbourne & Co, Noordam, Rotterdam
GAMBOGE—66 cs, 1,733 lbs, Dodge & Olcott, Indrani, Kobe
GUAIAC—1 bbl, A Behrens & Co, Adirondack, Pt au Prince
KAURI—549 cs, Paterson, Boardman & Co, Minnehaha, London
646 cs, S Winterbourne & Co, Minnehaha, London
383 cs, Poel & Arnold, Minnehaha, London
MASTIC—5 cs, 558 lbs, Parke, Davis & Co, Pocahontas, Trieste
SENEGAL—50 bls, David E Green & Co, Philadelphia, London
TRAG—14 cs, 3,920 lbs, Parke, Davis & Co, Lucania, Liverpool
69 cs, 14,990 lbs, Parke, Davis & Co, New York, London
INDIGO—65 cks, 34,634 lbs, H A Metz & Co, Noordam, Rotterdam
25 cks, 11,816 lbs, Kuttroff, P & Co, Noordam, Rotterdam
EXT—1 ck, 470 lbs, Spool Cotton Co, Astoria, Glasgow
IRON, OXIDE—62 cks, Hemingway & Co, Minnehaha, London
LAUREL LEAVES—11 bls, 2,855 lbs, Weaver & Sterry, Trojan Prince, Genoa
99 bls, 7,216 lbs, Weaver & Sterry, Pocahontas, Trieste
LEAD, OLEATE—10 cks, 1,190 lbs, W H Scheel, Zeeland, Antwerp
LINOLEATE—4 cks, 1,922 lbs, W H Scheel, Zeeland, Antwerp
RESINATE—5 cks, 671 lbs, W H Scheel, Zeeland, Antwerp
LIME JUICE—50 cs, Lehn & Fink, Mesaba, London
LICORICE PASTE—25 cs, 5,755 lbs, C W Jacobs & Allison, Citta di Napoli, Genoa
12 cs, Weaver & Sterry, Caldria, Marseilles
ROOT—50 bgs, 11,025 lbs, Parke, Davis & Co, Arabic, Liverpool
18 bls, Lehn & Fink, Patricia, H'b'g
LILACINE—5 cs, Ungerer & Co, La Lorraine, Havre
LITHOPONE—80 cks, 44,092 lbs, Gabriel & Schall, Bremen, Bremen
LIVERWORT—2 bls, Lehn & Fink, Patricia, Hamburg
LYCOPODIUM—5 cs, 1,100 lbs, J C Wiarda & Co, Pennsylvania, Hamburg
10 cs, 2,200 lbs, Parke, Davis & Co, Patricia, Hamburg
MANGANESE, BORATE—10 cks, 1,086 lbs, W H. Scheel, Zeeland, Antwerp
LINOLEATE—2 cks, 882 lbs, W H Scheel, Zeeland, Antwerp
OLEATE—10 cks, 1,172 lbs, W H Scheel, Zeeland, Antwerp
RESINATE—5 cks, 640 lbs, W H Scheel, Zeeland, Antwerp
OXIDE—4 cks, J J Marsching & Co, Bremen, Bremen
MANURE SALT—100 tons, Peters, White & Co, Hindoo, Hull
1,186,075 lbs, H H Salman & Co, Bremen, Bremen
MANNA—1 cs, Eimer & Amend, Pocahontas, Trieste
MEDICINAL, BARK—3 bls, 684 lbs, Parke, Davis & Co, Pocahontas, Trieste
35 bls, 473 lbs, A U Andrus & Co, New York, London
BERRIES—1 ck, 307 lbs, A U Andrus & Co, New York, London
GRAMS—15 bgs, 2,293 bls, Stall & Fulton Co, Carpathia, Liverpool
HERBS—10 bls, Parke, Davis & Co, Pocahontas, Trieste
31 bls, Peek & Velsor, Pocahontas, Trieste
15 bls, Parke, Davis & Co, Patricia, H'b'g
LEAVES—30 bls, Tyler & Finch Co, Pennsylvania, Hamburg
70 bls, J D Hopkins & Co, Arabia, Liverpool
2 bgs, 264 lbs, A U Andrus & Co, B Princess, Antwerp
6 bls, Scheiffelin & Co, Patricia, Hamburg
79 bls, Parke, Davis & Co, Pocahontas, Trieste
11 bls, Fitzsimmons, Gleeson & Co, Pocahontas, Hamburg
PREP—22 cs, Farb of Elberfeld Co, Zeeland, Antwerp
1 cs, Merck & Co, K der Grosse, Bremen
2 cs, Fischer Chem Imp Co, K W der Grosse, Bremen
2 cs, Fischer Chem Imp Co, Bremen, Bremen
4 cs, Lehn & Fink, Patricia, Hamburg
ROOTS—7 bls, 847 lbs, Parke, Davis & Co, Moltke, Hamburg
10 bls, Bichels & Techow, Patricia, Hamburg
20 bls, 5,260 lbs, Parke, Davis & Co, Pocahontas, Trieste
20 bls, 4,400 lbs, Scheiffelin & Co, Pocahontas, Trieste
10 bls, 2,950 lbs, A U Andrus & Co, Patricia, Hamburg
10 bls, Eimer & Amend, Patricia, Hamburg
SEED—18 cs, 2,233 lbs, R Hilliers Son & Co, Pennsylvania, Hamburg
3 bls, 557 lbs, A U Andrus & Co, Patricia, Hamburg
MICA—5 cs, 764 lbs, Brown & Shaw, New York, London
20 cs, 2,171 lbs, E Munsell & Co, Minnehaha, London
1 cs, 264 lbs, Stove Mfgs Repair Co, Patricia, Hamburg
NAPTHOL—30 cks, 12,221 lbs, H A Metz & Co, Noordham, Rotterdam
1 cs, Farb of Elberfeld Co, Zeeland, Antwerp
4 cs, Roessler & H Chem Co, Patricia, Hburg
NAPHTHALINE—80 bbls, 27,868 lbs, White Tar Co, Br Princess, Antwerp
NUTMEGS—59 cs, 3,990 lbs, J Kissock & Co, Noordam, Rotterdam
53 pkgs, Frame & Co, Minnehaha, London
NUX VOMICA—799 pockets, 22,400 lbs, McKesson & Robbins, Indrani, Cochin
75 bgs, 10,456 lbs, Darragh & Small, Indrani, Cochin
OCHRE—1 cs, 240 lbs, Pomeroy & Fisher, Minnehaha, London
125 cks, 99,910 lbs, J Lee Smith & Co, Calabria, Leghorn
OIL, ALMOND—30 cs, 3,440 lbs, G Lueders & Co, Hohenzollern, Genoa
CAMPHOR—251 cs, 17,984 lbs, Dodge & Olcott, Indrani, Kobe
412 pkgs, Magnus & Lauer, Indrani, Kobe
CANANGA—2 cs, 120 lbs, C Rockhill, Trojan Prince, Genoa
COCOANUT—236 hhds, 112,206 lbs, R Crooks & Co, Indramayo, Cochin
121 pps, 264,242 lbs, R Crooks & Co, Pennsylvania, Hamburg
121 hhds, 112,000 lbs, Oil Seeds Pressing Co, Pennsylvania, Hamburg
57 pkgs, 33,685 lbs, Winter & Smillie, Indrani, Cochin
82 pps, R Crooks & Co, Indrani, Cochin
118 hhds, 56,000 lbs, Darragh & Small, Indrani, Cochin
151 pkgs, 281,000 lbs, R Crooks & Co, Hohenfels, Colombo
COD—5 cks, 249 gls, Harvey & Outerbridge, Silvia, St Johns
COD LIVER—50 bbls, 1,500 gls, David E Green & Co, Amsterdam, R'dam
ESS'L—2 cs, E H Burr, La Touraine, Havre
4 cs, Magnus Lauer, Hohenzollern, Genoa
1 cs, G Lueders & Co, Hohenzollern, Genoa
7 cs, G Lueders & Co, Bremen, Bremen
10 cs, Fritzsche Bros, Bremen, Bremen
4 cs, Magnus & Lauer, Patricia, H'b'g
1 cs, Lehn & Fink, Patricia, Hamburg
1 cs, Lehn & Fink, La Lorraine, Havre
1 cs, Lehn & Fink, Calabria, Marseilles
FUSEL—40 cks, 15,239 lbs, T Hofacker, Hindoo, Hull
69 cks, 30,823 lbs, C Cooper & Co, Hindoo, Hull
41 cks, 12,580 lbs, C Cooper & Co, Br Princess, Antwerp
GERANIUM—6 cs, Leeburger Bros, Weimar, Genoa
1 cs, 5 lbs, C Rockhill, Trojan Prince, Genoa
GERANIUM ROSE—2 cs, Ungerer & Co, Hohenzollern, Genoa
HAARLEM—25 cs, 3,850 lbs, McKesson & Robbins, Noordam, Rotterdam
25 cs, 3,850 lbs, Fitzsimmons, Gleeson & Co, Noordam, Rotterdam
LAVENDER—28 cs, Leeburger Bros, Weimar, Genoa
3 cs, 300 lbs, C Rockhill, Trojan Prince, Genoa
6 cs, T H Grossmith, Hohenzollern, Genoa
5 cs, G Lueders & Co, Hohenzollern, Genoa

A. Klipstein & Company,

122 PEARL ST., NEW YORK.

Chemicals & Dye Stuffs

AGENTS FOR

ANILINE COLORS

Made by the Society of Chemical Industry, BASLE.

CHLORATE OF POTASH

BRANCH HOUSES.—BOSTON, 283-285 Congress St. PHILADELPHIA, 50-52 N. Front St. CHICAGO, 136 Kinzie St. PROVIDENCE, R. I., 13 Mathewson St. HAMILTON ONT., Catharine St. MONTREAL, 17 Lemoine St.

LEMON—10 cs, T M Duche & Son, California, Palermo
LINALOE—3 cs, Ungerer & Co, Hohenzollern, Genoa
LINSEED—60 bbls, 3,100 gals, F B Vandergrift & Co, Minnehaha, London
MYRBANE—20 cs, The Selling Co, Minnehaha, London
NEROLI—1 cs, Magnus & Lauer, Hohenzollern, Genoa
2 cs, Ungerer & Co, Hohenzollern, Genoa
OLIVE, FOOTS—100 bbls, 5,000 gals, Swan & Finch Co, Trojan Prince, Leghorn
700 bbls, 36,410 gals, Oil Seeds Pressing Co, Lacronia, Malaga
419 bbls, 1,180 gls, Oil Seeds Pressing Co, Patria, Lisbon
50 bbls, 2,250 gls, Nittner & Slavitz, Trojan Prince, Naples
50 bbls, 2,250 gls, Nittner & Slavitz, Neapolitan Prince, Naples
50 bbls, 2,250 gls, Welch, Holme & Clark Co, Neapolitan Prince, Naples
275 cks, 12,375 gals, Nittner & Slavitz, Dinnamare, Messina
25 cks, 1,283 gals, Peters, White & Co, Calabria, Leghorn
ORANGE—10 cs, 218 lbs, C B Leighton, Minnehaha, London
ORIGANUM—1 cs, 100 lbs, C Rockhill, Trojan Prince, Genoa
4 cs, 56 lbs, G Lueders & Co, Hohenzollern, Genoa
PALM—172 cks, 247,308 lbs, Colgate & Co, Georgic, Liverpool
78 cks, 112,935 lbs, Colgate & Co, Moltke, Hamburg
38 cks, 57,048 lbs, Colgate & Co, Bovic, Liverpool
12 cks, Roessler & H Chem Co, Patricia, Hamburg
20 cks, 17,465 lbs, A Klipstein & Co, Patricia, Hamburg
CAUSTIC—20 dms, Roessler & H Chem Co, Patricia, Hamburg
27 dms, 14,786 lbs, A Klipstein & Co, Patricia, Hamburg
MURI—1,500 bgs, 335,280 lbs, H J Baker & Bro, Bremen, Bremen
PRUSS—83 cks, 67,644 lbs, Roessler & H Chem Co, Noordam, R'dam
30 cks, 22,695 lbs, Roessler & H Chem Co, Patricia, Hamburg
SULPH—2,000 bgs, 448,000 lbs, Peters, White & Co, Patricia, Hamburg
PUMICE—30 cs, 4¼ tons, A Gunther, Noordam, Rotterdam
415 bgs, 40 tons, R J Waddell & Co, Calabria, Leghorn
QUEBRACHO, EXT—7 cs, 2,156 lbs, Sykes & Street, La Touraine, Havre
1,186 bgs, 134,776 lbs, F E Atteaux & Co, Br Princess, Antwerp
WOOD—870 tons, New York & Boston Dyewood Co, America, Colastine
RED LEAD—25 cks, 16,287 lbs, G A & E Meyer, Noordam, R'dam
SACCHARINE—2 cs, 341 lbs, Merck & Co, Bremen, Bremen
SAFFRON—1 cs, Lehn & Fink, Germanic, Liverpool
SAGE—60 bls, 25,357 lbs, Frame & Co, Pocahontas, Venice
SAGO FLOUR—1,585 bgs, C Von Pustau & Co, Indrani, Singapore
SALTPETRE—600 bgs, Balch, Bailey & Co, Hohenfels, Calcutta
2,466 bgs, Ralli Bros, Hohenfels, Calcutta
TOLUOLE, BINITRO—10 pkgs, Farb of Elberfeld Co, Zeeland, Antwerp
TURMERIC—140 bgs, 18,775 lbs, A D Hitch & Co, Minnehaha, London
TURPENTINE (Venice)—20 cs, 1,782 lbs, Parke, Davis & Co, Pocahontas, Fiume
5 cs, Eimer & Amend, Pocahontas, Fiume
ULTRAMARINE—16 cks, 3,520 lbs, Kuttroff, Pickhardt & Co, Noordam, R'dam
10 cks, 2,238 lbs, C F Zentgraf, Bremen, Bremen
UMBER—100 bls, 23,483 lbs, W E Browne & Co, Calabria, Leghorn
VANILLA BEANS—1 cs, 165 lbs, H Marquardt & Co, Esperanza, Vera Cruz
12 cs, Chas E Hire's Co, New York, Southampton
VARNISH—60 dms, 750 gals, Pomeroy & Fischer, Minnehaha, London
VENETIAN RED—17 bbls, Hemingway & Co, Minnehaha, London
252 bbls, 7,056 lbs, J Lee Smith, Bovic, Liverpool
VERDEGRIS—10 cks, Roessler & H Chem Co, Noordam, R'dam
VERMILION—1 ck, J Lee Smith & Co, Minnehaha, London
WASH BLUE—50 cs, 2,507 lbs, Jas A Hays & Co, Br Princess, Antwerp
WAX, BEE'S—3 bgs, 450 lbs, L N Chemidlin & Co, Matanzas, Tampico
3 bgs, 400 lbs, U S Export Ass'n, Esperanza, Havana
47 bgs, G Dear, Matanzas, Tampico
2 bgs, A Behrens & Co, Adirondack, Pt au Prince
CERESIN—65 bgs, 14,300 lbs, Strohmeyer & Arpe Co, Patricia, Hamburg
JAPAN—100 cs, 18,067 lbs, Parke, Davis & Co, Afridi, Kobe
WHITE—128 pkgs, 1,634 lbs, J Lee Smith & Co, Minnehaha, London
ZINC, CHLO—15 bbls, 10,957 lbs, Roessler & H Chem Co, Noordam, R'dam
15 bbls, 12,227 lbs, Berlin Aniline Works, Patricia, H'b'g
OXIDE—100 bbls, 22,046 lbs, G A & E Meyer, Zeeland, Antwerp
50 cks, 22,046 lbs, J A & W Bird & Co, Br Princess, Antwerp
25 bbls, 11,023 lbs, J W Coulston & Co, Antwerp
SULPH—4 cks, 2,800 lbs, W H Scheel, Pennsylvania, Hamburg

WAREHOUSED.

ANILINE COLORS—2 bbls, J J Keller & Co, Zeeland, Antwerp
1 ck, Cassella Color Co, Noordam, R'dam
18 bbls, Farb of Elberfeld Co, Zeeland, Antwerp
BERLIN BLUE—15 cks, 3,524 lbs, Baese & Co, Bremen, Bremen
BRONZE POWDER—4 cs, 2,000 lbs, R F Lang, Gr Kurfurst, Bremen
CHEMICAL COMP—17 cs, R F Downing & Co, Moltke, Hamburg
2 cs, E Levi, Noordam, R'dam
PREP—435 cs, Roessler & H Chem Co, Noordam, R'dam
COLORS—6 cs, Baese & Co, Bremen, Bremen
6 cs, Favor, Ruhl & Co, K W der Grosse, Bremen
CORKS—97 bls, 11,754 lbs, A Daussa & Co, Teutonic, L'pool
115 bls, 14,876 lbs, L Mundet & Son, Lacroma, Barcelona
36 bls, 4,577 lbs, W J Farrell, Zeeland, Antwerp
GELATINE—40 cs, 4,389 lbs, J Pollitz, Noordam, R'dam
GLUE—24 cks, 11,695 lbs, C Townsend, Arabic, Liverpool
69 cks, 14,303 lbs, O G Hempstead & Co, Pennsylvania, Hamburg
LOGWOOD EXT—116 cks, 60,975 lbs, Dillon & Co, Erica, Kingston
OIL, ESS'L—20 cs, Dodge & Olcott, Bremen, Bremen
LINALOE—11 cs, Graham, Hinkley & Co, Esperanza, Vera Cruz
PEPPERMINT—7 cs, 420 lbs, Stallman & Fulton Co, Manitou, London
WOOD—125 cks, 49,037 lbs, E Hill's Son & Co, Indramayo, Shanghai
230 cks, 85,089 lbs, E Hill's Son & Co, Indrani, Shanghai
OLEO, STEARINE—139 bgs, 22,340 lbs, E S Kuh & Co, Pennsylvania, Hamburg
OPIUM—15 cs, 1,657 lbs, McKesson & Robbins, New York, London
SODA, PHOS—27 cs, 22,369 lbs, A Klipstein & Co, St Nicholas, Antwerp
SPONGE—95 bls, Lasker & Bernstein, Esperanza, Havana
177 bls, Lasker & Bernstein, Seneca, Nassau
63 bls, Lasker & Bernstein, Mexico, Havana
VERMILION—10 cs, 660 lbs, A B Ansbacher & Co, Richmond Castle, Hong Kong

Withdrawals from Bond.

Week ending July 17.

Albumen, cs	25
Alcohol, bbls	6
Aniline colors, cks	109
Aniline colors, cs	6
Bristles, cs	12
China clay, cks	200
Corks, bls	184
Colors, cs	8
Dextrine, bgs	100
Gelatine, cs	32
Glue, cs	25
Glue, bbls	33
Glue, cks	65
Glue, bgs	20
Gum, chicle, bls	11
Gum, chicle, bgs	72
Isinglass, bls	1
Licorice paste, cs	75
Logwood extract, cks	60
Mica, cs	55
Oil, essential, cs	10
Oil, geranium, cs	1
Oil, linaloe, cs	4
Opium, cs	18
Quinine, cs	1
Soda, caustic, dms	13
Sponge, bls	41

Boston Imports.

ACID, OXALIC—25 cks, Kuttroff, Pickhardt & Co, Macedonia, Hamburg
ALCOHOL—3 cs, Patterson, Wylde & Co, Macedonia, Hamburg
ANILINE COLOR—20 cks, Berlin An Wks, Macedonia, Hamburg
BLEACH—344 cks, J L & D S Riker, Michigan, Liverpool
CALCIUM, SULPHATE—3 cs, Macedonia, Hbg
CHALK—500 tons, Columbian, London
CHEMICALS—28 cs, Patterson, Wylde & Co Macedonia, Hamburg
CHEMICAL SALTS—9 cs, Patterson, Wylde & Co, Macedonia, Hamburg
CHINA CLAY—40 cks, C S Bush & Co, Michigan, Liverpool
252 cks, J B Moors & Co, Michigan, Lpool
1,000 cks, Hammill & Gillespie, Michigan, Liverpool
COLOR—9 cks, Columbian, London
CUTCH—500 bgs, Macedonia, Hamburg
DRUGS—4 cs, Columbian, London
FULLER'S EARTH—100 bgs, Columbian, Ldon
GREASE—30 bbls, Ivernia, Liverpool
70 cks, Geo H Leonard & Co, Columbian, London
WOOL—140 bbls, Macedonia, Hamburg
125 bbls, Kidder, Peabody & Co, Macedonia, Hamburg
400 bbls, Geo H Leonard & Co, Macedonia, Hamburg
INDIGO—14 pkgs, Columbian, London
5 cks, A Lee & Co, Macedonia, Hamburg
POWD—5 cks, A Lee & Co, Macedonia, Hamburg
NAPHTHOL—3 cks, Howe, Fuller & Trunkett, Macedonia, Hamburg
OIL, LUB—50 bbls, Baring Bros & Co, Michigan, Liverpool
OLIVE—100 bbls, Brown Bros & Co, Michigan, Liverpool
6 cks, A Freno, Vancouver, Genoa
200 bbls, Columbian, London
PALM—30 cks, Michigan, Liverpool
ORIS ROOT—30 bgs, Vancouver, Med Ports
PITCH—500 cks, Columbian, London
POTASH—38 cks, Macedonia, Hamburg
CHLORATE—150 cks, Vancouver, Med Ports
MUR—500 bgs, Macedonia, Hamburg
QUEBRACHO, EXT—500 bgs, Macedonia, Hbg
350 bbls, C A Spencer, Vancouver, Mediterranean Ports
SHELLAC—25 cs, Merrill, Dexter & Co, Columbian, London
SOAP—100 cs, P Hansan, Columbian, London
SODA, ASH—65 cks, Michigan, Liverpool
160 bgs, 40 tcs, 113,937 lbs, Wing & Evans, Bostonian, Liverpool
CHLORATE—100 cks, Vancouver, Med Ports
140 cks, Macedonia, Hamburg

CREAM OF TARTAR. TARTARIC ACID.

GUARANTEED 99—100 Per Cent. Pure.

TARTAR CHEMICAL COMPANY, 92 William Street, NEW YORK.

205 cks, Colby & Co, Patricia, Hamburg
PEPPERMINT—1 cs, 28 lbs, C B Leighton, Minnehaha, London
PETROLEUM—10 cks, F A Marsily, Zeeland, Antwerp
15 cks, Fiske Bros Ref Co, Zeeland, Ant
20 cks, 7,240 lbs, Bliven & Carrington, Br Princess, Antwerp
RAPESEED—300 bbls, 113,289 lbs, Standard Oil Co, Carpathia, Liverpool
116 bbls, 5,994 gals, Haebler & Co, Nauplia, Stettin
ROSE—2 cs, Dodge & Olcott, Carpathia, Lpool
1 cs, Fries Bros, Noordam, Rotterdam
3 cs, Ungerer & Co, Kronprins Wilhelm, Bremen
2 cs, Ungerer & Co, K W der Grosse, Bremen
ROSEMARY—5 cs, 500 lbs, C Rockhill, Trojan Prince, Genoa
1 cs, Eimer & Amend, Pocahontas, Trieste
SESAME—25 bbls, 9,740 lbs, Weaver & Sterry, Calabria, Marseilles
SOD—25 bbls, Swan & Finch Co, Manitou, London
THYME—2 cs, 200 lbs, C Rockhill, Trojan Prince, Messina
YLANG YLANG—3 cs, 26 lbs, Morewood & Co, Strathord, Manila
3 cs, Ungerer & Co, Minnetonka, London
OLEO, STEARINE—78 tcs, 67,343 lbs, Wilcox Lard Ref Co, Bovic, Liverpool
65 bgs, 11,169 lbs, Central Lard Co, Noordam, Rotterdam
ORANGE MINERAL—16 cks, 11,204 lbs, Kuttroff, Pickhardt & Co, Zeeland, Antwerp
FLOWERS—4 cs, Ungerer & Co, Hohenzollern, Genoa
1 ck, Lehn & Fink, Germanic, Liverpool
PAINT—40 dms, 4,400 lbs, H A Kessel & Co, Patricia, Hamburg
PEPPER—136 bgs, D P Cruikshank, Pennsylvania, Hamburg
621 bgs, J W Phyfe & Co, Indrani, Singapore
SHELLS—176 bgs, Frame & Co, Minnehaha, London
PIMENTO—529 bgs, 68,770 lbs, J E Kerr & Co, Erica, Jamaica
201 bgs, 28,938 lbs, Macy & Dunham, Erica, Jamaica
PITCH—28 cks, 39,443 lbs, Fuerst Bros & Co, Noordam, R'dam
COAL TAR—300 bgs, 26 tons, Schoellkopf, H & H Co, Numidian, London
PLUMBAGO—226 bbls, 125,042 lbs, C B Richard & Co, Hohenzollern, Genoa
451 bbls, 287,480 lbs, H W Peabody & Co, Hohenfels, Colombo
559 bbls, 346,092 lbs, R Crooks & Co, Hohenfels, Colombo
POTASH, CARB—38 cks, 44,426 lbs, Peters, White & Co, Pennsylvania, Hamburg
48 cks, 67,621 lbs, A Klipstein & Co, Hindoo, Hull
25 cks, 33,778 lbs, J C Wiarda & Co, Zeeland, Antwerp
1,154 bgs, Howe, Fuller & Trunkett, Hohenfels, Calcutta
SARSAPARILLA—41 bls, 9,305 lbs, L N Chemidlin & Co, Matanzas, Tampico
SEAWEED—1 bl, Fitzsimmons, Gleeson & Co, Fr Bismarck, Hamburg
SHELLAC—102 cs, Rogers & Pyatt, Manitou, London
150 chts, Hensel, B & L, Manitou, London
100 cs, G A Alden & Co, Manitou, London
294 cs, 85,628 lbs, Rogers & Pyatt, Minnehaha, London
155 cs, Hensel, B & L, Minnehaha, London
496 pkgs, Berry Bros, Hohenfels, Calcutta
SIENNA—30 cks, 13,818 lbs, J W Coulston & Co, Zeeland, Antwerp
30 cks, 14,070 lbs, J W Coulston, Calabria, Leghorn
SOAP, CASTILE—500 cs, 20,346 lbs, J D Nordlinger, Trojan Prince, Genoa
1,000 cs, 40,501 lbs, Weaver & Sterry, Trojan Prince, Genoa
700 cs, 28,408 lbs, J D Nordlinger, Calabria, Leghorn
850 cs, 34,311 lbs, Weaver & Sterry, Calabria, Leghorn
SODA, ASH—500 bgs, 112,000 lbs, Wing & Evans, Victorian, Liverpool
37 tcs, 64,557 lbs, Wing & Evans, Victorian, Liverpool
BISULPH—57 dms, Roessler & H Chem Co, Noordam, R'dam
PRUSS—36 cks, 22,400 lbs, A Klipstein & Co, Georgic, Liverpool
SAL—140 cks, 56,000 lbs, Wing & Evans, Victorian, Liverpool
SULPH—50 cks, 19 tons, J J Keller & Co, Zeeland, Antwerp
SPONGE—95 bls, Lasker & Bernstein, Esperanzas, Havana
469 cs, Lasker & Bernstein, New York, London
10 bls, McKesson & Robbins, Morro Castle, Havana
469 cs, Lasker & Bernstein, New York, London
10 bls, McKesson & Robbins, Morro Castle, Havana
7 bls, Lasker & Bernstein, Mexico, Havana
62 bls, Lasker & Bernstein, Seneca, Nassau
SQUILLS—1 ck, Eimer & Amend, Pocahontas, Liverpool
STRYCHNINE—2 cs, H Beste, Minnehaha, London
SUMAC, EXT—5 cs, 1,100 lbs, Sykes & Street, La Touraine, Havre
TALC—500 bgs, 109,402 lbs, L A Saloman & Bro, Hohenzollern, Genoa
TAPIOCA FLOUR—160 bgs, 34,469 lbs, Abe Stein Co, Noordam, R'dam
825 bgs, J W Rulon & Son, Indrani, Singapore
1,811 bgs, R Crooks & Co, Indrani, Singapore
TAR—30 bbls, Rahtjens Am Comp Co, Minnehaha, London
TOLUIDINE—8 dms, Selling Co, Minnehaha, London
36 bls, 4,577 lbs, W J Farrell, Zeeland, Antwerp
GELATINE—40 cs, 4,389 lbs, J Pollitz, Noordam, R'dam
GLUE—24 cks, 11,695 lbs, C Townsend, Arabic, Liverpool
69 cks, 14,303 lbs, O G Hempstead & Co, Pennsylvania, Hamburg
LOGWOOD EXT—116 cks, 60,975 lbs, Dillon & Co, Erica, Kingston
OIL, ESS'L—20 cs, Dodge & Olcott, Bremen, Bremen
LINALOE—11 cs, Graham, Hinkley & Co, Esperanza, Vera Cruz
PEPPERMINT—7 cs, 420 lbs, Stallman & Fulton Co, Manitou, London
WOOD—125 cks, 49,037 lbs, E Hill's Son & Co, Indramayo, Shanghai
230 cks, 85,089 lbs, E Hill's Son & Co, Indrani, Shanghai
OLEO, STEARINE—139 bgs, 22,340 lbs, E S Kuh & Co, Pennsylvania, Hamburg
OPIUM—15 cs, 1,657 lbs, McKesson & Robbins, New York, London
SODA, PHOS—27 cs, 22,369 lbs, A Klipstein & Co, St Nicholas, Antwerp
SPONGE—95 bls, Lasker & Bernstein, Esperanza, Havana
177 bls, Lasker & Bernstein, Seneca, Nassau
63 bls, Lasker & Bernstein, Mexico, Havana
VERMILION—10 cs, 660 lbs, A B Ansbacher & Co, Richmond Castle, Hong Kong

Withdrawals from Bond.

Week ending July 17.

Albumen, cs	25
Alcohol, bbls	6
Aniline colors, cks	109
Aniline colors, cs	6
Bristles, cs	12
China clay, cks	200
Corks, bls	184
Colors, cs	8
Dextrine, bgs	100
Gelatine, cs	32
Glue, cs	25
CRYSTALS—140 cks, 56,000 lbs, Wing & Evans, Bostonian, Liverpool	
STARCH, GROUND—200 bgs, Baring Bros & Co, Macedonia, Hamburg	
TAR—300 bbls, Columbian, London	
WAX—45 pkgs, Macedonia, Hamburg	

Philadelphia Imports.

ACID, CARBOLIC—34 cks, City of Bombay, Glasgow
BLEACH—44 cks, J L & D S Riker, City of Bombay, Liverpool
CHINA CLAY—14 cks, Noordland, L'pool
CORKWOOD—562 bls, Noordland, Liverpool
FULLERS EARTH—700 bgs, Planet Venus, Avonmouth
FUSTIC—1,750 tons, Sharpless D E Co, Tercia, Punta Arenas
GREASE, WOOL—10 bbls, Jas Bowers & Co, Noordland, Liverpool
INDIAN RED—40 cks, Noordland, Liverpool
IRON OXIDE—20 kgs, Noordland, Liverpool
LITHARGE—10 cks, City of Bombay, Glasgow
PEPPER—62 bgs, Mackinaw, London
SODA, BICARB—15 cks, J L & D S Riker, City of Bombay, Glasgow
CRYSTALS—140 cks, 56,000 lbs, Wing & Evans, Friesland, L'pool
VENETIAN RED—100 bbls, Noordland, L'pool

Baltimore Imports.

ACID, OXALIC—10 cks, Fitzclarence, Ant
ANILINE COLOR—11 cs, Fitzclarence, Ant
BARYTES—7,249 bgs, Fitzclarence, Antwerp
CHEMICALS—38 cks, Nicomedia, Hamburg
CHINA CLAY—331 cks, Rowanmore, L'pool
CORKS—10 bls, Massachusetts, London
CORKWOOD—80 bls, Cassel, Bremen
FERTILIZER—1,120 bgs, Nicomedia, H'b'g
GLASS PLATE—28 cs, Fitzclarence, Antwerp
WINDOW—405 cs, Fitzclarence, Antwerp
KAINIT—2,118 tons, Cassel, Bremen
MANURE SALT—201 tons, Cassel, Bremen
OIL, COCOANUT—24 pipes, Massachusetts, London
RAPE—6 bbls, Nicomedia, Hamburg

POTASH
CYANIDE
PRUSSIATE
CARBONATE
CAUSTIC and
All Heavy and Fine Chemicals

Soda Ash
Soda Prussiate
Sal Soda
Caustic Soda
Etc.

ACID
Acetic
Phosphoric
Carbolic
Etc.

Extracts
Gums

ZINC DUSY.

IMPORTERS—Commission Merchants—EXPORTERS.

FUERST BROS. & CO.

2 Stone St., NEW YORK, & 17 Bridge St.

Bleaching Powders

MINERALS
Fluorspar
Fullers Earth
China Clay
Barytes, Etc.

OILS
CASTOR
OLIVE
RAPE
COCOANUT
ESSENTIAL.

CORRESPONDENCE SOLICITED.

WHITE—5 cks, Fitzclarence, Ant
PEPPER—35 bgs, Massachusetts, London
PHOSPHATE—8,100 bgs, Fitzclarence, Ant
POTASH—90 bgs, Nicomedia, Hamburg
MURIATE—1,000 bgs, Cassel, Bremen
1,100 bgs, Fitzclarence, Ant
SULPH—500 bgs, Nicomedia, Hamburg
SODA, ASH—18 tcs, 31,893 lbs, Wing & Evans, Templemore, L'pool
VENETIAN RED—150 bgs, Rowanmore, Liverpool

Newport News Imports.

AMMONIA, CARB—15 cs, M L Barrett & Co, Kanawha, Liverpool
MURI—23 cks, M L Barrett & Co, Kanawha, Liverpool
BLEACH—300 cks, J L & D S Riker, Kanawha, Liverpool
CHINA CLAY—6 cs, Jean Freese, Kanawha, Liverpool
284 cks, Morey & Co, Kanawha, L'pool
OIL, PALM—56 cks, Warren & Co, Kanawha, Liverpool

New Orleans Imports.

AMMONIA SULPH—1,425 bgs, Wayfarer, Liverpool
CANARYSEED—200 bgs, Wayfarer, Liverpool
GUM, CHICLE—48 bls, David, Belize
OIL—1,000 bbls, Wayfarer, Liverpool
SOAP—200 bxs, Wayfarer, Liverpool
SODA ASH—26 tcs, 46,314 lbs, Wing & Evans, Wayfarer, L'pool
VENETIAN RED—100 bbls, Wayfarer, L'pool

San Francisco Imports.

BARK—378 bgs, Maldonado & Co, Curacao, La Paz
2,890 bgs, Maldonado & Co, Curacao, Buena Vista
SODA, CAUSTIC—25 drs, Meyer, Wilson & Co, Alfield, Newcastle
WAX—11 bgs, C D Bunker & Co, Curacao, Ensenada

EXPORTS FROM NEW YORK.

Week ending July 16.

ACID—1 cs, 1 cby, Esperanza, Vera Cruz
ACETIC—1 cby, $15, Alene, Savanilla
CARB, CRYS—2 cs, $22, Coamo, Porto Rico
NITRIC—2 cbys, $19, Niceto, Cuba
8 cbys, $66, Philadelphia, La Guayra
STEARIC—6 bgs, 1,200 lbs, $119, Adirondack, Port Limon
SULPHURIC—2 cbys, $8, Prins der Nederlanden, La Guayra
5 cbys, $20, Alene, Kingston
2 drs, $51, Niceto, Cuba
2 drs, $44, Adirondack, Kingston
2 drs, $53, Adirondack, Port Limon
3 cbys, $20, Adirondack, Barranquilla
40 cbys, $142, Curityba, Cuba
1 dr, $26, Philadelphia, La Guayra
ALCOHOL—5 bbls, $75, Alene, Savanilla
AMMONIA—2 kegs, $26, Mexico, Havana
100 cyls, $4,479, Hyacinthus, Buenos Ayres
10 cyls, $443, Esperanza, Havana
2 cbys, $11, Niceto, Cuba
2 cbys, $11, Santiago, Tampico
4 cyls, $240, Adirondack, Kingston
1 dr, $9, Adirondack, Savanilla
3 cyls, $155, Curityba, Cuba
ANHY—25 cyls, $1,269, Esperanza, Vera Curz
4 cyls, $197, Niceto, Cuba
12 cyls, $613, Santiago, Tampico
AQUA—6 drs, $275, Esperanza, Vera Cruz
4 cbys, $21, Morro Castle, Havana
SAL—3 bbls, 1,002 lbs, $88, Santiago, Tampico
1 bbl, 1 keg, $20, Curityba, Cuba
ANILINE COLOR—8 bbls, $937, Zeeland, Ant
ANISEED—3 bgs, 306 lbs, $25, Alene, Savanilla
BALSAM—2 cs, $155, Georgic, Liverpool
1 cs, $73, La Touraine, Havre
BARK—2 bls, 218 lbs, $50, Patria, Marseilles
EXT—500 bgs, 55,000 lbs, $2,643, Silvia, Halifax
BRIMSTONE—1 bbl, $16, Coamo, Porto Rico
CALCIUM, CARBIDE—73 drs, 9.725 lbs, $260, Prins der Nederlanden, La Guayra
420 cans, $1,102, Niceto, Cuba
1,700 cans, $4,745, Saturnina, Cuba
CANDLES—111 cs, $142, Zulia, Curacao
5 cs, $6, Trinidad, Bermuda
2 crts, $25, Prins der Nederlanden, La Guayra
2 crts, $25, Prins der Nederlanden, Hayti
248 cs, $687, Coamo, Porto Rico
7 cs, $18, Alene, Kingston
147 cs, $1,267, Allianca, Colon
25 cs, $32, Piemonte, Surinam
5 cs, $58, Fontabelle, Demerara
15 cs, $63, Seguranca, Colon
6 cs, $14, Venturer, Bluefields
2 cs, $11, Adirondack, Kingston
31 cs, $91, Adirondack, Savanilla
8 cs, $28, Erica, Kingston
1 cs, $2, Curityba, Cuba
200 cs, $253, Philadelphia, La Guayra
50 cs, $116, Philadelphia, San Juan
CARBON—200 bbls, $1,500, La Touraine, Havre
25 bbls, $225, Zeeland, Antwerp
CASSIA—1 bl, $5, Zulia, Curacao
5 bls, $23, Zulia, Maracaibo
6 bls, $27, Prins der Nederlanden, La Guayra
6 cs, $18, Bolivia, Hayti
25 bls, $120, Hyacinthus, Buenos Ayres
5 bls, $25, Esperanza, Havana
2 bls, $23, Adirondack, Savanilla
2 cs, $12, Erica, Kingston
1,150 bls, $1,475, Minnehaha, London
25 bls, $120, Newton, Buenos Ayres
12 bls, $59, Philadelphia La Guayra
CHEMICAL SALTS—117 cs 2,925 lbs, $9,360, New York, Southampton
CHEMICALS—30 cks, 18,621 lbs, $3,550, Minnehaha, London
20 cks, 11,200 lbs, $2,375, Garrick, Manchester
CINNAMON—1 bl, 102 lbs, $19, Esperanza, Vera Cruz
2 bls, 200 lbs, $40, Santiago, Tampico
8 bls, 1,054 lbs, $214, Adirondack, Savanilla
CLOVES—71 bgs, $238, Prins der Nederlanden, La Guayra
10 bls, $72, Esperanza, Vera Cruz
2 bls, $21, Niceto, Cuba
1 bl, $14, Santiago, Tampico
3 bls, $40, Adirondack, Savanilla
CORKS—71 bls, $1,830, Montevideo, Barcelona
2 bls, $15, Allianca, Colon
COTTONSEED—380 bgs, 50,600 lbs, $1,000, Carpathia, Liverpool
15 bgs, $45, Esperanza, Havana
MEAL—40 bgs, 4,000 lbs, $56, Trinidad, Bermuda
100 bgs, 10,200 lbs, $125, Esperanza, Vera Cruz
10 bgs, 1,000 lbs, $14, Erica, Kingston
CUMMIN SEED—1 bg, 193 lbs, $13, Zulia, Curacao
3 bgs, 454 lbs, $42, Zulia, Maracaibo
15 bgs, 1,530 lbs, $90, Alene, Savanilla
51 bgs, 5,291 lbs, $358, Adirondack, Savanilla
DYEWOOD, EXT—50 bbls, 25,417 lbs, $1,400, Georgic, Liverpool
1 bbl, 170 bxs, 10,450 lbs. $593, Zeeland, Antwerp
10 bbls, $298, Hellig Olav, Copenhagen
25 bxs, 1 bbl, 1,862 lbs, $133, Pennsylvania, Hamburg
10 bbls, 5,433 lbs, $273, Garrick, Manchester
FERTILIZER—2 bbls, 10 bgs, $40, Coamo, Porto Rico
5,000 bgs, $30,090, Mexico, Havana
300 bgs, $1,163, Saturnina, Cuba
6,300 bgs, $29,710, Morro Castle, Havana
FLAXSEED—20,594 bush, Ryndam, R'dam
GLUCOSE—60 bbls, $800, Carpathia, L'pool
5 bbls, $79, Silvia, Halifax
150 bbls, $2,050, Hyacinthus, Buenos Ayres
300 bbls, $3,690, Laurentian, Glasgow
100 bbls, $1,284, Amulree, Fremantle
240 bbls, $2,954, Brooklyn City, Bristol
60 bbls, $632, Minnehaha, London
1,010 bbls, $12,674, Garrick, Manchester
610 bbls, $7,790, Hindoo, Hull
50 bbls, $570, Newton, Buenos Ayres
GLUE—3 bgs, $39, Coamo, Porto Rico
1 cs, $35, New York, Southampton
6 cs, $24, Amulree, Fremantle
3 bbls, 835 lbs, $82, Esperanza, Havana
2 bbls, 600 lbs, $43, Niceto, Cuba
2 bbls, 489 lbs, $52, Santiago, Tampico
3 cs, $9, Adirondack, Port Limon
7 bbls, $28, Minnehaha, London
8 bbls, $244, Ryndam, Rotterdam
1 bbl, $25, Curityba, Cuba
1 kg, $10, Morro Castle, Havana
GLYCERINE—3 drs, $435, Philadelphia, La Guayra
GRAPE SUGAR—500 bgs, 55,000 lbs, $1,750, Laurentian, Glasgow
500 bgs, 56,000 lbs., $1,120; Brooklyn City, Bistol
2,250 bgs, $252,000 lbs, $5,000, Minnehaha, London
GRAPHITE—10 bbls, $210, Pennsylvania, Hamburg
GREASE, SOAP—2,000 tcs, $29,821, California, Marseilles
192 tcs, $1,000, Arabic, Liverpool
LUB—1 cs, $6, Zulia, Maracaibo
84 bbls, $5,001, Mexico, Havana
2 bbls, $81, Alene, Cartagena
2 cs, $19, Maraval, Trinidad
1,000 bbls, $16,833, California, Marseilles
3 bbls, $42, Georgic, Liverpool
25 bbls, $333, Silvia, Halifax
5 bbls, 10 cs, 5 kgs, $234, New York, Southampton
150 bbls, $3,320, Hellig Olav, Stettin
12 cs, $44, Allianca, Colon
1 cs, $6, Tenedos, Constantinople
300 bbls, $4,310, Tenedos, Odessa
50 cs, 100 kgs, 80 pkgs, $298, Amulree, Fremantle
10 cs, $25, Esperanza, Havana
6 bbls, 40 kgs, $165, Niceto, Cuba
500 bbls, $7,383, Calabria, Marseilles
50 bbls, 1 pkg, $829, Seguranca, Colon
5 bbls, 1 cs, $66, Taff, Banes
5 cs, $9, Pennsylvania, Hamburg
14 bbls, $115, Lucania, Liverpool
20 bbls, 1 cs, $412, Benedict, Para
251 bbls, 3 cs, $4,321, Morro Castle, Havana
75 bbls, $994, Garrick, Manchester
300 bbls, $4,635, Hindoo, Hull
MINERAL—425 bbls, $2,550, Carpathia, Liverpool
GUM—1 bbl, $49, Morro Castle, Havana
ARABIC—1 cs, 200 lbs, $33, Philadelphia, La Guayra
DAMAR—10 bgs, 5 cs, $2,582 lbs, $378, Santiago, Tampico
KALSOMINE—6 cs, $54, Amulree, Fremantle
LAMP BLACK—8 cs, $53, Esperanza, Vera Cruz
8 bbls, 1 cs, $37, Adirondack, Savanilla
LEAD—3,623 pigs, 336,112 lbs, $7,500, Kronprinz Wm, Bremen
1,687 pigs, 180,072 lbs, $4,500, Brooklyn City, Bristol
1,199 pigs, 112,034 lbs, $2,500, Ryndam, Rotterdam
4,134 pigs, 336,000 lbs, $7,500, Hellig Olav, St Petersburg
5,884 pigs, 560,078 lbs, $13,702, Moltke, Hamburg
6,451 pigs, 672,426 lbs, $15,000, Bovic, Liverpool
2,394 pigs, 224,168 lbs, $5,500, Calabria, Leghorn
9,043 pigs, 896,260 lbs, $20,000, Zeeland, Antwerp
1,384 pigs, 110,656 lbs, $2,500, Pennsylvania, Hamburg
4,831 pigs, 448,199 lbs, $11,000, Numidian, Glasgow
15,634 pigs, 1,402,162 lbs, $20,175, Garrick, Manchester
LIME, ACETATE—355 bgs, 45,164 lbs, $850, Astoria, Glasgow
1,634 bgs, 228,541 lbs, $4,050, Zeeland, Ant
3,260 bgs, 465,430 lbs, $7,490, Arabic, Liverpool
297 bgs, 42,146 lbs, $600, Zeeland, Antwerp
2,365 bgs, 333,995 lbs, $5,000, Pennsylvania, Hamburg
LINSEED CAKE—1,194 bgs, 448,690 lbs, $5,500, Georgic, Liverpool
902 bgs, 334,196 lbs, $3,950, Ryndam, Amsterdam
MICA—6 cs, $800, Minnehaha, London
MILK SUGAR—20 cs, 4,400 lbs, $349, Ryndam, R'dam
25 cs, 2,800 lbs, $316, Lucania, L'pool
110 cs, 12,150 lbs, $978, Pennsylvania, H'b'g
OCHER—112 bbls, $500, Garrick, Manchester
OIL, ALMOND—6 cs, $81, Prins der Nederlanden, La Guayra
ANIMAL—100 gls, $73, Benedict, Para
CAKE—1,730 bgs, 445,795 lbs, $4,827, California, Marseilles
667 bgs, 224,449 lbs, $2,635, Georgic, Lpool
2,182 bgs, 673,751 lbs, $8,130, Ryndam, Amsterdam
3,697 bgs, 1,160,580 lbs, $13,300, Ryndam, Rotterdam
5,288 bgs, 1,826,360 lbs, $22,988, Zeeland, Antwerp
CASTOR—10 cs, $102, Alene, Barranquilla
1 cs, $8, Esperanza, Vera Cruz
14 cs, $133, Adirondack, Savanilla
5 cs, $24, Cuzco, Callao
COCOANUT—8 cs, $78, Alene, Barranquilla
8 cs, $68, Adirondack, Barranquilla
CODLIVER—22 bbls, $990, Philadelphia, La Guayra
CORDAGE—100 bbls, $636, Morro Castle, Havana
CORN—250 bbls, $5,675, Ryndam, Rdam
130 bbls, $2,516, Laurentian, Glasgow
300 bbls, $5,500, Zeeland, Antwerp
190 bbls, $3,672, Brooklyn City, Bristol
133 bbls, $2,357, Garrick, Manchester
COTTONSEED—10 bbls, 93 cs, $784, Maraval, Trinidad
100 bbls, $2,161, Ryndam, Rotterdam
110 cs, $621, Allianca, Colon
55 bbls, 200 cs, $2,302, Hyacinthus, Montevideo
23 bbls, 25 cs, $616, Fontabelle, Barbadoes
47 bbls, $1,106, Fontabelle, Demerara
100 bbls, $2,226, Arabic, Liverpool
25 bbls, $375, Zeeland, Antwerp
10 cs, $39, Santiago, Tampico
11 bbls, 25 cs, $388, Adirondack, Kingston
12 bbls, 62 cs, $584, Erica, Kingston
50 bbls, $1,104, Pennsylvania, Hamburg
10 bbls, $255, Minnehaha, London
750 bbls, $15,735, Patria, Marseilles
200 bbls, $4,400, Hindoo, Hull
25 bbls, $550, Talisman, Guadeloupe
150 bbls, $3,450, Talisman, Fort de France
25 bbls, $550, Talisman, Trinite
50 cs, $260, Cuzco, Arica
CYLINDER—250 gls, $141, Alene, Cartagena
200 gls, $45, Teutonic, Liverpool
50 gls, $9, Seguranca, Colon
1,000 gls, $200, Benedict, Para
50 gls, $25, Morro Castle, Havana
ESS'L—1 cs, $15, Zulia, Curacao
2 cs, $54, Alene, Cartagena
2 cs, $151, Santiago, Tampico
11 cs, $618, Pennsylvania, Hamburg
30 cs, $1,364, Minnehaha, London
7 cs, $1,162, Patria, Marseilles
1 cs, $33, Philadelphia, La Guayra
FISH—100 bbls, $1,350, Arabic, Liverpool
LARD—150 gls, $63, Montevideo, Barcelona
80 gls, $61, Allianca, Colon
30 gls, $23, Fontabelle, Barbadoes
500 gls, $268, Fontabelle, Demerara
50 gls, $18, Adirondack, Savanilla
50 gls, $45, Garrick, Manchester
LINSEED—100 gls, $42, Trinidad, Bermuda
30 gls, $15, Prins der Nederlanden, Hayti
400 gls, $214, Coamo, Porto Rico
30 gls, $14, Bolivia, Hayti
200 gls, $126, Alene, Savanilla
100 gls, $52, Piemonte, Trinidad
10 gls, $7, Esperanza, Vera Cruz
50 gls, $23, Venturer, San Andreas
120 gls, $53, Venturer, Bluefields
20 gls, $11, Santiago, Tampico
50 gls, $26, Adirondack, Port Limon
250 gls, $175, Adirondack, Savanilla
200 gls, $107, Benedict, Para
150 gls, $69, Curityba, Cuba
110 gls, $48, Philadelphia, La Guayra
500 gls, $243, Cuzco, Valparaiso
LUB—150 gls, $93, Zulia, Curacao
400 gls, $63, Zulia, Maracaibo
600 gls, $93, Trinidad, Bermuda
2,000 gls, $1,150, Mexico, Havana
350 gls, $126, Alene, Kingston
450 gls, $167, Alene, Cartagena
300 gls, $52, Maraval, Trinidad
21,750 gls, $4,117, Montevideo, Barcelona
65,058 gls, $16,980, Georgic, Liverpool
28,450 gls, $4,765, Carpathia, Liverpool
92,957 gls, $13,826, Minnehaha, London
15,350 gls, $2,410, Astoria, Glasgow
550 gls, $121, Teutonic, Liverpool
26,500 gls, $3,389, Patria, Marseilles
6,250 gls, $750, Ryndam, Amsterdam
16,200 gls, $3,558, Ryndam, Rotterdam
5,000 gls, $600, Hellig Olav, Copenhagen
1,250 gls, $150, Hellig Olav, Oelfe
9,300 gls, $1,190, Hellig Olav, Gothenburg
8,000 gls, $960, Hellig Olav, Stockholm
1,250 gls, $339, Allianca, Colon
600 gls, $100, La Touraine, Havre
14,271 gls, $3,293, Hyacinthus, Buenos Ayres
1,548 gls, $201, Hyacinthus, Montevideo
150 gls, $24, Piemonte, Barbadoes
12,750 gls, $1,530, Tenedos, Constantinople
1,700 gls, $205, Amulree, Fremantle
6,000 gls, $752, Esperanza, Vera Cruz
300 gls, $49, Esperanza, Havana
800 gls, $148, Niceto, Cuba
100 gls, $15, Seguranca, Colon
6,000 gls, $720, Zeeland, Antwerp
150 gls, $37, Adirondack, Kingston
50 gls, $10, Adirondack, Port Limon
100 gls, $62, Adirondack, Savanilla
22,250 gls, $2,670, Brooklyn City, Bristol
103,000 gls, $16,652, Pennsylvania, Hbg
4,000 gls, $1,397, Benedict, Para
900 gls, $161, Saturnina, Cuba
7,500 gls, $1,128, Patria, Barcelona
100 gls, $15, Morro Castle, Havana
102,300 gls, $12,966, Garrick, Manchester
45,583 gls, $7,071, Hindoo, Hull
19,740 gls, $3,940, Newton, Rosario
600 gls, $144, Cuzco, Guayquil
30,600 gls, $6,750, Cuzco, Valparaiso
12,650 gls, $2,597, Cuzco, Callao
MEAL—14 bgs, 1 hf bbl, 1,850 lbs, $23, Trinidad, Bermuda
1,116 bgs, 20 bbls, 143,500 lbs, $1,917, Maraval, Trinidad
50 bgs, 6,250 lbs, $84, Maraval, San Fernando
150 bgs, 18,750 lbs, $255, Fontabelle, Barbadoes
30 bgs, 3,750 lbs, $50, Fontabelle, St Croix
3 bgs, 375 lbs, $5, Adirondack, Kingston
MIN'L COLZA—905 gls, $125, Alene, Kingston
3,750 gls, $450, Montevideo, Barcelona
2,500 gls, $1,033, Ryndam, R'dam
1,250 gls, $150, Tenedos, Constantinople
500 gls, $70, Adirondack, Cartagena
25,000 gls, $3,000, Brooklyn City, Bristol
14,950 gls, $1,794, Garrick, Manchester
MUSTARD SEED—10 bbls, $286, Ryndam, R'dam
NEATSFOOT—750 gls, $100, Ryndam, R'dam
20 gls, $14, Fontabelle, Barbadoes
OLEO—2,196 tcs, $67,450, Ryndam, R'dam
61 tcs, $1,725, Hellig Olav, Copenhagen
175 tcs, $5,425, Hellig Olav, Christiania
3 tcs, $77, Fontabelle, Demerara
15 tcs, $665, Zeeland, Antwerp
500 tcs, $20,025, Pennsylvania, Hamburg
200 tcs, $5,375, Naupilia, Copenhagen
140 tcs, $4,050, Hindoo, Hull
OLIVE—2 bbls, $58, Curityba, Cuba
PALM—5 bbls, $106, Curityba, Cuba
PEP—1 bx, $28, Fontabelle, St Croix
1 bx, $20, Adirondack, Kingston
RED—10 bbls, $184, Curityba, Cuba
100 bbls, $1,000, Hindoo, Hull
SEWING MACH—2 cs, $9, Teutonic, L'pool
2 cs, $6, Esperanza, Vera Cruz
5 cs, $27, Adirondack, Port Limon
1 pkge, $13, Adirondack, Savanilla
27 cs, $66, Benedict, Manaos
23 cs, $83, Hindoo, Hull
25 cs, $58, Newton, Buenos Ayres
1 cs, $3, Cuzco, Antofagasta
SPERM—3 cs, $20, Adirondack, Savanilla
OPIUM—10 tins, $1,400, Saturnina, Cuba
PAINT—3 cs, $15, Zulia, Curacao
2 cs, $14, Zulia, Maracaibo
2 cs, $35, Trinidad, Bermuda
8 cs, $120, Prins der Nederlanden, Carupano
1 keg, 2 cs, $22, Prins der Nederlanden, Porto Cabello
4 bbls, 19 cs, $204, Coamo, Porto Rico
19 cs, 1 bbl, $312, Mexico, Havana
2 cs, $34, Bolivia, Hayti
4 cs, 1 bbl, $98, Alene, Kingston
1 bbl, 12 cs, $88, Alene, Savanilla
53 cs, $420, Maraval, Trinidad
1 cs, $6, Maraval, San Fernando
26 cs, $279, Montevideo, Barcelona
7 cs, $188, Montevideo, Madrid
47 cs, $365, Georgic, Liverpool
10 pkgs, $27, Teutonic, Liverpool
3 cs, 1 kg, $92, Silvia, St Johns
7 bbls, $146, Silvia, Halifax
1 cs, $10, New York, Southampton
1 cs, $20, Ryndam, Rotterdam
50 cs, $800, Hellig Olav, Copenhagen
2 cs, 2 pkgs, $106, Allianca, Colon
19 cs, $100, Moltke, Hamburg
3 cs, $15, Tenedos, Constantinople
1 cs, $16, Tenedos, Malta
5 cs, 3 bbls, $341, Amulree, Fremantle
8 bbls, 9 cs, 5 kgs, $494, Esperanza, Vera Cruz
9 cs, $145, Esperanza, Havana
4 cs, $33, Fontabelle, Barbadoes
20 bbls, $1,000, Arabic, Liverpool
4 bbls, 7 cs, $136, Niceto, Cuba
8 kgs, 1 bbl, $15, Venturer, San Andreas
4 bbls, 3 cs, $57, Santiago, Tampico
7 bbls, 1 cs, $174, Santiago, Nassau
1 cs, $49, Adirondack, Port Limon
4 bbls, 10 kgs, 13 cs, $169, Adirondack, Savanilla
5 cs, $148, Pennsylvania, Hamburg
6 cs, $104, Benedict, Para
13 bbls, 2 kgs, $465, Curityba, Cuba
4 bbls, 4 cs, $158, Saturnina, Cuba
7 cs, $76, Morro Castle, Havana
20 cs, $100, Newton, Buenos Ayres
11 cs, $98, Newton, Montevideo
8 cs, $98, Philadelphia, La Guayra
1 kg, 1 crt, $22, Philadelphia, San Juan
PARIS GREEN—1 cs, $9, Saturnina, Cuba
PEPPER—4 bgs, $50, Zulia, Maracaibo
3 bgs, $26, Prins der Nederlanden, Hayti
3 bgs, $50, Prins der Nederlanden, Porto Cabello
15 bgs, $177, Coamo, Porto Rico
2 bgs, $26, Alene, Kingston
3 bgs, $35, Maraval, Trinidad
1 bg, $13, Allianca, Colon
10 bgs, $155, Esperanza, Vera Cruz
10 bgs, $121, Esperanza, Havana
2 bgs, $29, Fontabelle, Barbadoes
5 bgs, $81, Niceto, Cuba
2 bgs, $35, Adirondack, Savanilla
25 bgs, $415, Benedict, Para
16 bgs, $243, Philadelphia, La Guayra
PETROLEUM—(See Petroleum Clearances on page 28.)
PETROLEUM JELLY—1 cs, $6, Maraval, San Fernando
1 cs, $20, Allianca, Colon
6 cs, $210, Hyacinthus, Buenos Ayres
3 cs, 1 pkg, $33, Adirondack, Kingston
15 bbls, 70 cs, $1,878, Pennsylvania, Hbg
1 cs, $11, Benedict, Para
7 cs, $96, Hindoo, Hull
14 cs, $320, Newton, Buenos Ayres
PIMENTO—200 bgs, 27,145 lbs, $1,400, Pennsylvania, Hamburg
5 bgs, 677 lbs, $34, Philadelphia, La Guayra
PITCH—2 bbls, Coamo, Porto Rico
6 bbls, $10, Alene, Kingston
10 bbls, $30, Alene, Savanilla
10 bbls, $18, Esperanza, Havana
2 bbls, $4, Erica, Kingston
10 bbls, $20, Saturnina, Cuba
10 bbls, Philadelphia, San Juan
PLUMBAGO—1 keg, 1 cs, $21, Montevideo, Barcelona
3 cs, $20, Silvia, Halifax
6 bbls, 20 cs, 10 kegs, $278, New York, Southampton
6 bbls, $79, Esperanza, Vera Cruz
2 bbls, $36, Curityba, Cuba
2 bbls, $29, Saturnina, Cuba
6 bbls, $60, Morro Castle, Havana
POTASH—20 cks, 13,388 lbs, $750, La Touraine, Havre
10 kegs, 1,120 lbs, $75, Santiago, Tampico
CARB—1 bbl, $28, Curityba, Cuba
CYANIDE—5 cs, 1,120 lbs, $213, Allianca, Colon
75 cs, 8,400 lbs, $1,764, Seguranca, Colon
PUMICE—3 bbls, $15, Morro Castle, Havana
QUININE, MURIATE—3 bxs, $23, Minnehaha, London
RED LEAD—20 kegs, $38, Benedict, Manaos
1 keg, $6, Zulia, Curacao
3 kegs, $20, Bolivia, Hayti
35 kegs, $225, Allianca, Colon
2 kegs, $13, Niceto, Cuba
20 kegs, $34, Adirondack, Savanilla
ROSIN—54 bbls, $242, Zulia, Maracaibo
25 bbls, $135, Prins der Nederlanden, La Guayra
200 bbls, $688, Alene, Cartagena
21 bbls, $85, Maraval, Trinidad
1,100 bbls, $5,768, Hyacinthus, Buenos Ayres
1,000 bbls, $5,000, Tenedos, Odessa
1,300 bbls, $6,500, Francis E. Hampshire, Santos
5 bbls, $27, Esperanza, Vera Cruz
1 bbl, $4, Fontabelle, Demerara
38 bbls, $179, Niceto, Cuba
150 bbls, $598, Calabria, Leghorn
20 bbls, $99, Adirondack, Kingston
26 bbls, $132, Adirondack, Port Limon
200 bbls, $425, Adirondack, Barranquilla
1,400 bbls, $3,625, Astoria, Glasgow
115 bbls, $369, Benedict, Para
146 bbls, $795, Curityba, Cuba
12 bbls, $57, Morro Castle, Havana
141 bbls, $656, Philadelphia, La Guayra
SARSAPARILLA—9 bls, 2,019 lbs, $155, Patria, Marseilles
SHELLAC—1 bbl, 1 cs, $44, Morro Castle, Havana
SHEEP DIP—500 bgs, 56,500 lbs, $933, Hyacinthus, Buenos Ayres
41 bbls, 32,697 lbs, $1,280, Grosser Kurfurst, Bremen
SIZING—103 bgs, 23,020 lbs, $1,589, Pennsylvania, Hamburg
34 bbls, 12,140 lbs, $780, Garrick, Manchester
SOAP—145 cs, $432, Zulia, Curacao
2 cs, $126, Zulia, Maracaibo
14 cs, 1 bbl, $72, Trinidad, Bermuda
298 cs, $998, Prins der Nederlanden, Hayti
815 cs, $1,719, Coamo, Porto Rico
1 cs, $48, Mexico, Havana
2,194 cs, $3,906, Bolivia, Hayti
23 cs, $54, Alene, Kingston
75 cs, $92, Alene, Greytown
231 cs, $631, Alene, Cartagena
44 cs, $120, Maraval, Trinidad
1,550 cs, $3,820, Carpathia, Liverpool
933 cs, $1,617, Teutonic, Liverpool
5 cs, $15, Silvia, St Johns
2 cs, $7, Silvia, Halifax
597 cs, $914, Allianca, Colon
2 cs, $250, Hyacinthus, Buenos Ayres
210 cs, $497, Piemonte, Surinam
8 cs, $495, Amulree, Fremantle
12 cs, $244, Esperanza, Vera Cruz
1 cs, $48, Esperanza, Havana
355 cs, $640, Fontabelle, Barbadoes
606 cs, $1,368, Fontabelle, St Croix
3 cs, $14, Fontabelle, Demerara
1 cs, $7, Niceto, Cuba
23 cs, $44, Venturer, San Andreas
642 cs, $832, Venturer, Bocas del Toro
4 cs, $50, Santiago, Tampico
13 cs, $91, Adirondack, Kingston
132 cs, $247, Adirondack, Port Limon
120 cs, $415, Adirondack, Cartagena

Oxalic Acid, Kryofine, Triferrin, Pankreon, Lygosine (Natr. Lygosinat.), Chinin. Lygosinat., Gallogen

C. BISCHOFF & CO., 88 Park Place, . . . NEW YORK.

27 cs, $109, Erica, Kingston
1,001 cs, $2,518, Astoria, Glasgow
2 cs, $14, Pennsylvania, Hamburg
271 cs, $2,644, Minnehaha, London
18 cs, $137, Benedict, Para
3 cs, 6 bbls, $80, Curityba, Cuba
5 bbls, 73 cs, $819, Morro Castle, Havana
2 cs, $250, Newton, Buenos Ayres
1 cs, 1 bbl, $32, Philadelphia, La Guayra
188 cs, $642, Philadelphia, San Juan
1 cs, $50, Cuzco, Callao
35 cs, $2,182, Cuzco, Valparaiso

STOCK—30 bbls, $524, Curityba, Cuba

SODA, ASH—3 bbls, 1,057 lbs, $15, Zulia, Maracaibo
37 bbls, 12,190 lbs, $147, Silvia, St Johns
10 bbls, 3,216 lbs, $42, Adirondack, Port Limon
8 bbls, 2,873 lbs, $40, Philadelphia, La Guayra

BICARB—10 kgs, 1 bbl, 1,542 lbs, $23, Zulia, Maracaibo
1 kg, 112 lbs, $2, Prins der Nederlanden, Hayti
2 hf bbls, 462 lbs, $7, Bolivia, Haiti
5 bbls, 2,000 lbs, $23, Alene, Kingston
3 cs, 1,000 lbs, $11, Allianca, Colon
5 kgs, $560 lbs, $10, Esperanza, Vera Cruz
10 kgs, 1,120 lbs, $13, Fontabelle, Barbadoes
100 kgs, 11,200 lbs, $118, Fontabelle, Demerara
1 bbl, 400 lbs, $4, Fontabelle, St Croix
5 bbls, 2,000 lbs, $25, Adirondack, Port Limon
50 kgs, 1 bbl, 6,000 lbs, $57, Hindoo, Hull
200 bbls, 84,500 lbs, $700, Newton, Buenos Ayres
30 bbls, 12,000 lbs, $114, Newton, Montevideo

CARB—5 bbls, $21, Curityba, Cuba

CAUSTIC—14 drs, 11,008 lbs, $319, Zulia, Maracaibo
4 drs, 3,100 lbs, $85, Maraval, Trinidad
3 drs, 2,250 lbs, $63, Niceto, Cuba
5 drs, 3,750 lbs, $111, Adirondack, Port Limon
40 drs, 30,000 lbs, $688, Curityba, Cuba
10 drs, 6,750 lbs, $148, Morro Castle, Havana
19 drs, 14,525 lbs, $411, Philadelphia, La Guayra

NITRATE—544 bgs, 153,464 lbs, $3,224, Fontabelle, Barbadoes
159 bgs, 44,128 lbs, $1,020, Santiago, Tampico

SAL—1 bbl, 375 lbs, $4, Zulia, Maracaibo
4 bbls, 7 kgs, 2,350 lbs, $22, Trinidad, Bermuda
1 bbl, 375 lbs, $3, Alene, Kingston
1 bbl, 400 lbs, $3, Taff, Banes

SIL—10 bbls, $49, Curityba, Cuba
20 bbls, 12,493 lbs, $100, Morro Castle, Havana

SPERMACETI—40 cs, 2,500 lbs, $500, Garrick, Manchester

STARCH—31 cs, 7 bbls, $113, Trinidad, Bermuda
245 bgs, 15 bbls, 60 cs, $1,117, Coamo, Porto Rico
3 cs, $7, Silvia, Halifax
1 cs, $2, Allianca, Colon
15 cs, $140, La Touraine, Havre
400 bgs, $1,500, Laurentian, Glasgow
2 bbls, 5 cs, $27, Fontabelle, Barbadoes
6 bbls, 25 cs, $96, Fontabelle, St Croix
1 bbl, 3 cs, $16, Adirondack, Kingston
1 bbl, $126, Lucania, Liverpool
20 bbls, 500 bgs, $3,190, Minnehaha, London
25 cs, $66, Benedict, Manaos
900 bgs, $5,000, Garrick, Manchester
1 bbl, $9, Philadelphia, San Juan

STEARINE—2 bgs, 20 bxs, 4,491 lbs, $478, Mexico, Havana
1 tc, 375 lbs, $30, Fontabelle, Demarara
50 bgs, 10,000 lbs, $650, Adirondack, Port Limon

TALC—14 bgs, 2,240 lbs, $21, Erica, Kingston

TALLOW—25 cs, 270 lbs, $31, Prins der Nederlanden, Pto Cabello
1 bbl, 188 lbs, $16, Prins der Nederlanden, Hayti
1 crt, 100 lbs, $14, Bolivia, Hayti
10 bxs, 250 lbs, $18, Alene, Kingston
50 tcs, 18,146 lbs, $953, Arabic, L'pool
100 cs, 14,400 lbs, $864, Alene, Barranquilla
1,499 tcs, 601,935 lbs, $44,787, California, Marseilles
100 hhds, 114,300 lbs,; $5,970, Georgic, Liverpool
25 tcs, 9,305 lbs, $520, Kronprinz Wm., Bremen
500 tcs, 222,009 lbs, $8,800, Ryndam, Rotterdam
3 bbls, 1,158 lbs, $105, Piedmonte, Surinam
12 bxs, 300 lbs, $26, Fontabelle, Barbadoes
18 tcs, 7,078 lbs, $386, Fontabelle, Demerara
50 bbls, 60,000 lbs, $3,300, Arabic,, Liverpool
500 tcs, 175,933 lbs, $8,815, Calabria, Marseilles
35 tcs, 15,726 lbs, $472, Zeeland, Antwerp
10 tcs, 3,819 lbs, $213, Adirondack, Port Limon
100 cs, 14,400 lbs., $864, Adirondack, Barranquilla
25 tcs, 11,358 lbs,, $452, Pennsylvania, Hamburg
30 bbls, 12,680 lbs, $634, Curityba, Cuba
400 tcs, 162,587 lbs, $6,502, Patria, Marseilles

TANNERS' EXT—10 bbls, $500, Arabic, L'pool
5 bbls, $73, Silvia, St Johns
6 bbls, $135, Brooklyn City, Bristol
2 bbls, $45, Pennsylvania, Hamburg

TANNIN—20 bbls, 8,860 lbs, $2,550, Noordam, Rotterdam

TAPIOCA—3 bgs, 436 lbs.. $12, Maraval, Trinidad

TAR—3 bbls, $14, Zulia, Maracaibo
6 bbls, $29, Prins der Nederlanden, Curacao
6 bbls, $29, Mexico, Havana
1 bbl, $5, Alene, Kingston
2 bbls, $10, Venturer, Bluefields
23 bbls, $115, Esperanza, Vera Cruz
1 bbl, $5, Venturer, San Andreas
6 bbls, $30, Santiago, Tampico
10 bbls, $56, Adirondack, Kingston
2 bbls, $9, Adirondack, Savanilla
8 bbls. $40, Curityba, Cuba
28 bbls, $101, Saturnina, Cuba
10 bbls, $49, Morro Castle, Havana

COAL—1 bbl, $5, Maraval, Trinidad
30 bbls. $120, Santiago, Tampico

TURPENTINE—1 cs, $6, Zulia, Curacao
2 bbls, 1 cs, $61, Trinidad, Bermuda
2 cs, $14, Prins der Nederlanden, Porto Cabello
1 bbl, $28, Prins der Nederlanden, Hayti
1 bbl, $24, Coamo, Porto Rico
25 cs, $139, Mexico, Havana
2 cs, $11, Bolivia, Hayti
16 cs, $112, Alene, Savanilla
3 cs, $21, Maraval, Trinidad
6 cs, $37, Maraval, San Fernando
1 cs, $6, Adirondack, Kingston
10 bbls, $248, Silvia, Halifax
10 cs, $52, Allianca, Colon
300 cs, $1,701, Hyacinthus, Buenos Ayres
100 cs, $477, Hyacinthus, Montevideo
95 cs, $513, Amuiree, Fremantle
10 cs, $54, Piemonte, Trinidad
500 cs, $2,775, Francis S Hampshire, Santos
2 cs, $10, Esperanza, Vera Cruz
6 cs, $31, Esperanza, Havana
1,000 cs, 50 drs, $7,400, Seneca, Bombay
300 cs, $1,650, Seneca, Yokohama
20 cs, $117, Fontabelle, Barbadoes
10 cs, $56, Fontabelle, Demerara
10 bbls, 15 cs, $303, Niceto, Cuba
2 cs, $15, Santiago, Tampico
53 cs, $340, Adirondack, Kingston
1 dr, 4 cs, $91, Adirondack, Port Limon
50 cs, $297, Benedict, Para
25 cs, $111, Curityba, Cuba
2 bbls, 35 cs, $197, Saturnina, Cuba
15 bbls, $393, Morro Castle, Havana
850 cs, $4,486, Newton, Buenos Ayres
20 cs, $118, Philadelphia, La Guayra
2 bbls, 16 cs, $94, Philadelphia, La Guayra
30 cs, $150, Cuzco, Guayaquil
50 cs, $284, Cuzco, Pisaqua

VANILLA BEANS—29 cs, $3,079, Moltke, Hbg

VARNISH—50 gls, $30, Zulia, Maracaibo
10 gls, $7, Prins der Nederlanden, Porto Cabello
34 gls, $38, Coamo, Porto Rico
100 gls, $55, Alene, Kingston
100 gls, $65, Alene, Savanilla
390 gls, $331, Montevideo, Barcelona
10 gls, $13, Adirondack, Kingston
150 gls, $446, Ryndam, Rotterdam
10 gls, $11, Allianca, Colon
10 gls, $9, Grosser Kurfurst, Bremen
20 gls, $10, Esperanza, Havana
60 gls, $46, Fontabelle, Barbadoes
50 gls, $40, Arabic, Liverpool
80 gls, $19, Zeeland, Antwerp
50 gls, $100, Santiago, Tampico
50 gls, $34, Adirondack, Port Limon
120 gls, $122, Adirondack, Savanilla
380 gls, $558, Astoria, Glasgow
10 gls, $5, Kaiser Wm der Grosse, Bremen
2,500 gls, $3,750, Pennsylvania, Hamburg
20 gls. $24, Benedict, Para
260 gls, $133, Curityba, Cuba
10 gls, $7, Saturnina, Cuba
190 gls, $164, Morro Castle, Havana
1,260 gls, $1,875, Garrick, Manchester
120 gls, $93, Philadelphia, La Guayra
10 gls, $8, Philadelphia, San Juan
50 gls, $94, Cuzco, Valparaiso

WAX, PAR—630 bgs, 141,743 lbs, $7,560, Montevideo, Barcelona
1,140 bbls, 452,357 lbs, $22,620, Carpathia, Liverpool
150 bbls, 34,484 lbs, $1,800, Hellig Olav, Danzig
65 bbls, 700 bgs, 177,171 lbs, $9,495, Hellig Olav, Stettin
130 bbls, 43,552 lbs, $2,180, Hellig Olav, Gothenburg
106 cs, 23,790 lbs, $1,275, Amulree, Fremantle
800 bgs, 114,946 lbs, $5,891, Esperanza, Vera Cruz
500 bgs, 65,883 lbs, $3,567, Santiago, Tampico
20 bgs, 4,000 lbs, $225, Adirondack, Port Limon
320 bbls, 50 cs, 118,231 lbs, $5,910, Brooklyn City, Bristol
1,150 bgs, 10 cs, 258,931 lbs, $13,825, Pennsylvania, Hamburg
45,205 lbs, $2,200, Albano, Aberdeen
23 cs, 6,447 lbs, $351, Benedict, Para
300 bbls, 94,843 lbs, $4,380, Garrick, Manchester
600 bbls 174,414 lbs, $8,620, Hindoo, Hull

WHALEBONE—1 bdl, 130 lbs, $500, Kronprinz Wm, Bremen
1 bdl, $15, Grosser Kurfurst, Bremen

WHITE LEAD—1 keg, $6, Zulia, Curacao
12 kegs, $18, Prins der Nederlanden, Hayti
18 kegs, $57, Mexico, Havana
10 kegs, $10, Alene, Savanilla
2 bbls, $21, Niceto, Cuba
1 cs, $11, Adirondack, Savanilla

WHITING—10 bbls, $16, Mexico, Havana
10 bbls, $19, Esperanza, Havana
4 bbls, $9, Niceto, Cuba
2 bbls, $4, Santiago, Tampico
4 bbls. $8, Curityba, Cuba
1 bbl, $2, Saturnina, Cuba

WOOD FILLER—7 cs, $90, Ryndam, R'dam
4 bbls, 1 cs, $219, Zeeland, Antwerp
8 cs, $128, Astoria, Glasgow

ZINC ASHES—57 bbls, 43,427 lbs, $819, Brooklyn City, Swansea
239 bgs, 83,200 lbs, $2,100, Brooklyn City, Bristol
DROSS—207 slabs, 53,596 lbs, $855, Georgic, Liverpool
OXIDE—50 bbls, 11,200 lbs, $500, Brooklyn City, Bristol
100 bbls, 22,400 lbs, $1,000, Hindoo, Hull
100 bbls, 22,400 lbs, $1,000, Arabic, L'pool
100 bbls, 22,400 lbs, $1,000, Astoria, Glasgow
500 bbls, 112,000 lbs, $5,000, Minnehaha, London
200 bbls, 49,000, lbs, $2,000, Garrick, Manchester
SKIMMINGS—100 bbls, 123,240 lbs, $3,285, Brooklyn City, Swansea
WHITE—60 kegs, $130, Allianca, Colon

Boston Exports.

ACID, LACTIC—5 bbls, $138, Corean, Glasgow
BARK EXT—10 bbls, $160, Halifax, Halifax
GLUE, FISH—20 bbls, $1,003, Georgian, Lpool
16 pkgs, $173, Corean, Glasgow
GRAPE SUGAR—500 bags, $1,045, Georgian, Liverpool
GREASE—35 bbls, $686, Georgian, Liverpool
62 bbls, $1,075, New England, Liverpool
55 tcs, $2,541, New England, Liverpool
1 bbl, $26, Olivette, Halifax
LAMP BLACK—125 bbls, $296, Georgian, Liverpool
PAINT—2 cs, $30, St Croix, St John, N B
1 keg, 1 box, $15, Prince Arthur, Yarmouth
2 kegs, $14, Prince George, Yarmouth
1 keg, 5 cs, $74, Halifax, Halifax
2 bbls, $19, Olivette, Halifax
OIL, COTTONSEED—60 bbls, $350, Halifax, Halifax
LINSEED—3 bbls, $58, Prince Arthur, Yarmouth
REFINED—5 bbls, $30, Annie, Salmon River, N S
25 bbls, $125, Prince George, Yarmouth
PITCH—52 bbls, $75, Halifax, Halifax
SOAP—10 pkgs, $725, Ivernia, Liverpool
26 cs, $3,250, New England, Liverpool
SODA ASH—25 bbls, $210, Anglian, London
30 bbls, $180, New England, Liverpool
STARCH—2,200 bags, $13,860, Georgian, Lpool
TALLOW—575 bbls, $11,624, Georgian, L'pool
340 bbls, $7,035, New England, L'pool
VARNISH—9 cs, $157, Halifax, Halifax
3 cs, $59, St Croix, St John, N B
WAX, BEE'S—12 cs, $310, Anglian, London
1 bx, $4, Prince Arthur, Yarmouth

Philadelphia Exports.

ALCOHOL, WOOD—170 bbls, Montauk Point, London
ARSENIC—1 ck, Assyria, Hamburg
CARBON—287 bbls, 25 cs, Montauk Point, London
COPPER SULPHATE—9 bbls, Pennland, Ant
77 bbls, Mineola, Rotterdam
COTTONSEED—345 bgs, Pinnet Mars, Avonmouth
DYEWOOD, EXT—210 bbls, Westernland, Liverpool
GRAPE SUGAR—1,000 bgs, Mineola, Leith
GREASE—4 hf bbls, Mineola, R'dam
26 tcs, Assyria, Hamburg
MINERAL—845 bbls, Westernland, L'pool
PET—665 bbls, Westernland, Liverpool
LINSEED CAKE—4,603 bgs, Pennland, Ant
1,206 bgs, Assyria, Hamburg
MEAL—996 bgs, Assyria, Hamburg
OIL CAKE—666 bgs, Planet Mars, Avonmouth
14,435 bgs, Mineola, Rotterdam
7,567 bgs, Assyria, Hamburg
CORN CAKE—500 bgs, Assyria, Hamburg
LUB—150,629 gls, Pennland, Antwerp
58,000 gls, Planet Mars, Avonmouth
78,489 gls, Westernland, Liverpool
114,531 gls, Mineola, Rotterdam
133,979 gls, Assyria, Hamburg
44,640 gls, Minnesota, London
4,500 gls, Montauk Point, London
MEAL—199 bgs, Pennland, Antwerp
4,000 bgs, Assyria, Hamburg
MIN'L COLZA—8,600 gls, Planet Mars, Avonmouth
15,500 gls, Westernland, L'pool
513 gls, Assyria, Hamburg
NEATSFOOT—12 bbls, Pennland, Antwerp
12 bbls, Mineola, Rotterdam
OLEO—3,635 tcs, Mineola, Rotterdam
625 tcs, Assyria, Hamburg
PAINT—4 bbls, Westernland, L'pool
PETROLEUM JELLY—25 bbls, Mineola, R'dam
ROSIN—3 bbls, Mineola, Leith
2,050 bbls, Assyria, Hamburg
500 bbls, Montauk Point, London
SOAP—2,000 bxs, Planet Mars, Avonmouth
1,000 bxs, 5 bbls, 1 ck, Westernland, Liverpool
500 bxs, Mineola, Leith
20 bbls, Assyria, Hamburg
1,500 bxs, Minnesota, London
3,000 bxs, Montauk Point, London
SODA—150 bbls, Montauk Point, London
STARCH—1,400 bxs, 1,996 bgs, Mineola, R'dam
430 bbls, Montauk Point, London
STEARINE—1,400 tcs, Pennland, Antwerp
TALLOW—250 tcs, Pennland, Antwerp
600 tcs, Westernland, Liverpool
TURPENTINE—500 cs, Bayonne, Venice
WAX, PAR—280 cs, 50 bgs, Pennland Ant
829 bbls, 50 cs, Planet Mars, Avonmouth.
530 bbls, Westernland, Antwerp
862 cs, Minneola, Rotterdam
700 bgs, Assyria, Hamburg
1,210 bbls, Minnesota, London
567 bbls, Montauk Point, London
ZINC DROSS—131,060 lbs, Minnesota, London

Baltimore Exports.

BARK—900 bgs, Breslau, Bremen
OIL CAKE—1,034 bgs, Tampico, Rotterdam
4,980 bgs, Vedamore, Liverpool
LUB—40 bbls, Tampico, Rotterdam
300 bbls, Breslau, Bremen
91 bbls, Vedamore, Liverpool
120 bbls, Orthia, Glasgow
OLEO—1,684 tcs, Tampico, Rotterdam
RED—300 bbls, Breslau, Bremen
ROSIN—1,500 bbls, Breslau, Bremen
3 bbls, Orthia, Glasgow
SOAP—500 bxs, Vedamore Liverpool
SODA, BROMIDE—2 bbls, Breslau, Bremen
STARCH, CORN—150 cs, Orthia, Glasgow
SUMAC, EXT—10 bbls, Vedamore, Liverpool
WAX, PAR—135 bbls, Orthia, Glasgow

Savannah Exports.

COTTONSEED, MEAL—6,794 bgs, $12,575, Ramsay, Hamburg
OCHER—17 bbls, $75, Ramsay, Hamburg
OIL, ROSIN—110 bbls, $556, Ramsay, Hbg
PHOSPHATE—3,550 tons, $33,500, Ramsay, Hamburg
ROSIN—875 bbls, $3,413, Ramsay, Hamburg
6,330 bbls, $29,460, S P Shotter Co, Olivari, Buenos Ayres
TURPENTINE—3,100 bbls, $75,364, Ramsay, Hamburg

Newport News Exports.

BARK, EXT—59,046 lbs, St Leonards, Ant
OIL, CAKE—453,300 lbs, St Leonards, Ant
RED—113,385 lbs, St Leonards, Antwerp

Wilmington, N. C., Exports.

ROSIN—9,586 bbls, Kotka, London

New Orleans Exports.

CALCIUM, CARBIDE—10 drs, Esther, Bluefields
CANDLES—51 cs, Anselm, Belize
COTTONSEED, CAKE—31,264 bgs, Lady Armstrong, Aarhuus
MEAL—1,136 bgs, Lady Armstrong, Aarhuus
66 bgs, Wanderer, Liverpool
4,480 bgs, Brighton, Rotterdam
FULLER'S EARTH—201 bgs, Malem, Tampico
GREASE—50 tcs, Louisiana, Havana
OIL—8 bbls, Breakwater, Belize
21 bbls, Beverly, Bocas del Toro
9 bbls, Esther, Bluefields
11 bbls, Anselm, Belize
5 bbls, Olympia, Port Limon
1 bbl, Fulton, Ceiba
5 bbls, Taunton, Bocas del Toro
COTTONSEED—165 bbls, Louisiana, Havana
LUB—3 bbls, Geo W Kelley, Cape Gracias
PETROLEUM—500 cs, Anselm, Belize
303 cs, Geo Dumois, Ceibe
3 drs, Esther, Bluefields
PHOSPHATE—3,850 tons, Elswick Manor, Hbg
PITCH—9 bbls, Esther, Bluefields
ROSIN—280 bbls, Darien, Liverpool
10 bbls, Algiers, Port Limon
3 bbls, Anselm, Belize
SOAP—200 bxs, Condor, Bluefields
255 bxs, Brazos, Brazos de Santiago
58 bxs, Anselm, Belize
50 bxs, Esther, Bluefields
STARCH—25 bbls, Louisiana, Havana
TALLOW—75 bbls, Louisiana, Havana
26 bbls, 25 tcs, Algiers, Port Limon
1 bbl, Anselm, Belize
TAR—2 bbls, Esther, Bluefields
6 bbls, Anselm, Belize
TURPENTINE—1 bbl, Esther, Bluefields

San Francisco Exports.

ACID—1 pkg, Alameda, Honolulu
11 drs, City of Pekin, Br Columbia
7 pkgs, Curacao, Mexico
AMMONIA—2 cyls, Peru, Mexico
1 cyl, Peru, Guatemala
6 cyls, Curacao, Mexico
BORAX—103 lbs, Alameda, Honolulu
598 lbs, Curacao, Mexico
BRIMSTONE—24,050, Curacao, Mexico
CANDLES—36 bxs, Alameda, Honolulu
COPPER, SULPHATE—22,639 lbs, Curacao, Mexico
FERTILIZER—5,829 bgs, Peru, Havre
GUM—23 cs, Alameda, Honolulu
OIL, MEAL—2,625 lbs, Andrew Welch, Honolulu
PAINT—5 pkgs, Andrew Welch, Honolulu
4 pkgs, Peru, Mexico
55 pkgs, Alameda, Honolulu
1 pkg, Neutun, Marshall Islands
74 pkgs, Curacao, Mexico
5 pkgs, Mariposa, Tahiti
PUTTY—10 bbls, S G Wilder, Honolulu
3 bbls, Alameda, Honolulu
1 bbl, Mariposa, Tahiti
QUICKSILVER—50 flasks, Curacao, Mexico
ROSIN—450 lbs, Curacao, Mexico
SOAP—475 bxs, Andrew Welch, Honolulu
800 bxs, Ching Wo, Japan
106 bxs, Ching Wo, Hong Kong
236 bxs, Peru, Nicaragua
1,000 bxs, Peru, Columbia
47 bxs, Alameda, Honolulu
5 cs, Whittier, Kihei
9 bxs, Curacao, Mexico
175 bxs, Mariposa, Tahiti
SODA—100 lbs, Ching Wo, Hong Kong
1,413 lbs, Alameda, Honolulu
10,861 lbs, Curacao, Mexico
150 lbs, Mariposa, Tahiti
ASH—112,000 lbs, Whittier, Kihei
NITRATE—560,704 lbs, Ching Wo, Japan
TALLOW—20,307 lbs, Peru, Mexico
9,476 lbs, Peru, Guatemala
917 lbs, Curacao, Mexico
TAN BARK—624 bgs, Whittier, Kihei
TAR—2 bbls, Mariposa, Tahiti
TURPENTINE—10 cs, Andrew Welch, Honolulu
16 cs, Curacao, Mexico
3 cs, Mariposa, Tahiti
VARNISH—77 cs, 7½ bbls, Ching Wo, Japan
9 cs, Alameda, Honolulu
4 cs, Curacao, Mexico
1 pkg, Mariposa, Tahiti
WHITE LEAD—1 keg, Peru, Mexico
1 keg, Peru, Guatemala

J. L. & D. S. RIKER,

46 Cedar Street, ... NEW YORK.

Importers' and Manufacturers' Agents.

SOLE AGENTS FOR THE UNITED STATES AND CANADA OF

The United Alkali Co., Limited, of Great Britain,

FOR THE SALE OF THEIR VARIOUS BRANDS OF

BLEACHING POWDER

CHARTERS.

Following is a list of vessels chartered at principal ports during the past week to convey products to or from American ports:—

CHALK—Br str Osborne, from Calais to New York, 6s 6d
FERTILIZER—Sch H S Lanfair, hence to Norfolk, $1 20
LOGWOOD—Br str Kenett, from Hayti to north of Hatteras, p t
ROOTS—Br str Kenett, from Hayti to north of Hatteras, p t
PHOSPHATE—Br str Phyllis, from Tampa to Nantes, 14s 6d
Br str Robinia, from Tampa to Kings Lynn, p t
Br str New Orleans, from Tampa to France, p t
Str 2,500 tons, from Punta Gorda to Norfolk, $2 50
SODA, NITRATE—Br bk Glenclova, from west coast So Amer to U S or Europe, 20s, less 1s 3d direct

New York Domestic Receipts.

Week ending July 16.

ALCOHOL—53 bbls, J A Webb & Son, D, L & W R R
41 bbls, F O Boyd & Co, New Orleans
10 bbls, Van Opstal Co, New Orleans
25 bbls, order, New Orleans
180 bbls, J A Webb & Son, H R R R
25 bbls, Engel, H & Co, L V R R
226 bbls, Brooklyn Navy Yard, H R R R
25 bbls, Amer Dist Co, D, L & W R R
WOOD—193 bbls, W S Gray, L V R R
50 bbls, L A Salmon & Bro, D, L & W R R
BARK, EXT—60 bbls, order, O D S S L
BARYTES—281 bbls, order, O D S S L
BEESWAX—2 pkgs, order, O D S S L
1 pkg, order, Georgetown
BONE, BLACK—335 bgs, order, New Orleans
MEAL—60 bgs, order, New Orleans
BONES—372 bgs, order, Jacksonville
CLAY—3,367 bgs, order, Jacksonville
231 cks, Inter Paper Co, Charleston
181 bgs, Tidewater Co, Jacksonville
975 bgs, Owl Comm'l Co, Jacksonville
1 car, order, O D S S L
COTTONSEED, ASHES -237 bgs, order, New Orleans
FLAXSEED—12 cars, order, H R R R
50 cars, order, W S R R
41,900 bush, order, Canal
34,800 bush, Amer Linseed Co, Canal
GREASE—100 bbls, export, P R R
58 bbls, Davis Oil Co, P R R
83 tcs, export, L V R R
80 bbls, E Valk & Co, H R R R
180 tcs, W P Sinclair, H R R R
250 tcs, E Valk & Co, L V R R
150 tcs, W D Vandenhove & Co, H R R R
108 bbls, Poole & M, P R R
75 bbls, B T Babbitt, H R R R
114 bbls, E Valk & Co, P R R
30 bbls, export, E R R
100 tcs, export, H R R R
75 tcs, Welch, H & C Co, D, L & W R R
78 bbls, A L Knight & Co, P R R
15 tcs, Wessels & D, F R L
GUM, CHICLE—31 bls, Eggers & H, New Orleans
HIGHWINES—124 bbls, F O Boyd Co, New Orleans
25 bbls, H H Reimers, New Orleans
160 bbls, Steinhardt Bros & Co, P R R
220 bbls, Geo Clark, D, L & W R R
160 bbls, Nat Dist Co, D, L & W R R
80 bbls, J Marcus, L V R R
75 bbls, Engel, H & Co, L V R R
215 bbls, Amer Dist Co, D, L & W R R
160 bbls, Engel, H & Co, D, L & W R R
80 bbls, Steinhardt Bros & Co, D, L & W R R
70 bbls, J A Webb & Son, H R R R
10 bbls, order, New Orleans
30 bbls, J A Webb & Son, D, L & W R R
100 bbls, Merchants Dist Co, D, L & W R R
LEAD—500 pigs, Balbach, S & R Co, Galveston
5,283 pigs, Amer S & R Co, Galveston
OIL, CAKE—480 bgs, C S Richards, H R R R
15,840 bgs, export, D, L & W R R
208 bgs, export, E R R
COTTONSEED—10 tank cars, W J Wilcox Ld Co, W S R R
4 tank cars, Central Lard Co, E R R
9 tank cars, Swift & Co, E R R
1,194 bbls, Amer C O Co, Galveston
40 bbls, export, New Orleans
1,225 bbls, order, Savannah
300 bbls, export, B & O R R
400 bbls, order, O D S S L
100 bbls, Hopkins, D & Co., B & O R R
LINSEED—230 bbls, T R Bagot, W S R R
60 bbls, Macy & D, E R R
LUB—75 bbls, J A Zibell, L V R R
240 bbls, order, C R R of N J
72 bbls, order, P R R
200 bbls, Lunham & M, P R R
100 bbls, A H Post & Co, P R R
MEAL—1,000 bgs, export, D, L & W R R
OLEO—375 tcs, H Marples, H R R R
575 tcs, export, W S R R
1,645 tcs, export, L V R R
75 tcs, export, H R R R
30 tcs, export, E R R
250 tcs, export, D, L & W R R
ROSIN—175 bbls, order, Savannah
PETROLEUM, CRUDE—550,000 gls, Standard Oil Co, Sabine Pass
PITCH—10 bbls, order, Savannah
POTASH—25 cks, order, H R R R
2 cks, order, P R R
12 cks, order, F R L
10 cks, order, L V R R
54 cks, order, Balto Trans Co
2 cks, order, E R R
3 cks, order, D, L & W R R
CHLOR—25 kgs, order, P R R
50 kgs, McKesson & R, H R R R
ROSIN—3,900 bbls, S P Shotter Co, Jacksonville
750 bbls, M W Larendon, Jacksonville
438 bbls, order, Jacksonville
480 bbls, C B Turton & Co, Jacksonville
1,300 bbls, Paterson D Co, Jacksonville
335 bbls, order, O D S S L
68 bbls, L Breslauer, Charleston
114 bbls, Baily & M, Jacksonville
7 bbls, Tolar, H & Co, Jacksonville
2,471 bbls, order, Savannah
325 bbls, Tolar, H & Co, Georgetown
38 bbls, Baily & M, Georgetown
209 bbls, L Breslauer, Georgetown
42 bbls, Baily & M, Wilmington
108 bbls, Tolar, H & Co, Wilmington
50 bbls, order, Wilmington
53 bbls, Tolar, H & Co, Brunswick
1,000 bbls, export, Brunswick
SOAP, STOCK—20 bbls, order, O D S S L
25 bbls, order, Savannah
100 bbls, Oil Seeds Pressing Co, Galveston
SPONGE—40 bls, A Moses' Son & Co, Key West
25 bls, Vollman Sponge Co, Key West
55 bls, Lasker & B, Jacksonville
22 bls, E Meares, Jacksonville
25 bls, Leoni, Clonney & Co, Jacksonville
57 bls, order, Savannah
STEARINE—83 tcs, export, E R R
100 bbls, order, C R R of N J
SUMAC—700 bgs, order, O D S S L
TALC—847 bgs, order; O D S S L
TALLOW—80 bbls, W D Vandenhove & Co, P R R
587 tcs, 150 bbls, export, E R R
40 tcs, O M Scripture, D, L & W R R
70 tcs, order, C R R of N J
4 bbls, order, O D S S L
28 bbls, W D Vandenhove & Co, W S R R
167 tcs, export, D, L & W R R
289 tcs, export, L V R R
11 bbls, order, L V R R
269 tcs, export, W S R R
277 bbls, order, F R L
TAR—182 bbls, order, O D S S L
5 bbls, order, Savannah
23 bbls, Tolar, H & Co, Georgetown
118 bbls, order, Wilmington
TURPENTINE—52 bbls, order, O D S S L
83 bbls, Tolar, H & Co, Jacksonville
16 bbls, E Breslauer, Charleston
12 bbls, Baily & M, Jacksonville
977 bbls, order, Savannah
145 bbls, Tolar, H & Co, Georgetown
9 bbls, Baily & M, Georgetown
27 bbls, Tolar, H & Co, Wilmington
10 bbls, B Moore & Co, Wilmington
45 bbls, M W Larendon, Wilmington
250 bbls, Paterson D Co, Wilmington
6 bbls, F S Clark, Wilmington
36 bbls, F W Blossom, Wilmington
125 bbls, order, Wilmington
600 bbls, Paterson D Co, Brunswick
408 bbls, order, Brunswick
200 bbls, S P Shotter Co, Jacksonville
50 bbls, M W Larendon, Charleston
CRUDE—60 bbls, Paterson D Co, Wilmington
VANILLA BEANS—24 cs, order, Galveston

Total Domestic Receipts.

At New York for week ending July 16, 1903.

	For week.	Since Jan. 1.
Alcohol, bbls	585	5,094
Beeswax, pkgs	3	237
Boneblack, bgs	335	4,412
Borax	....	875
Cottonseed, bgs	....	4,731
Ashes, bgs	237	612
Cake, bgs	....	2,090
Hulls	....	1,100
Meal; bgs	....	36,158
Flaxseed, bush	138,700	1,104,110
Glue	....	250
Grease	1,496	20,073
Highwines, bbls	1,509	57,345
Lead, pigs	5,783	296,898
Mustard seed, bgs	....	4,313
Oil cake, bgs	16,528	457,862
Cottonseed, bbls	6,364	265,435
Fish, bbls	....	2,048
Lard, bbls	....	1,652
Lubricating, bbls	777	18,493
Oleo stock, tcs	2,950	89,308
Pitch, bbls	10	1,624
Quicksilver, flks	....	4,971
Rosin, bbls	11,686	206,267
Soap stock, bbls	145	5,987
Spelter, pigs	....	82,159
Sponge, bls	224	4,156
Stearine, pkgs	183	3,426
Sumac, bgs	700	4,226
Tallow, pkgs	1,972	31,089
Tar, bbls	328	21,243
Turpentine, crude, bbls	60	575
Spirits, bbls	3,051	72,784

Boston Domestic Receipts.

Week ending July 15.

GREASE—796 bbls
TALLOW—480 bbls

Baltimore Domestic Receipts.

Week ending July 15.

COTTONSEED, MEAL—400 bgs, Savannah
OIL, ROSIN—2 bbls, Savannah
PITCH—88 bbls, Savannah
ROSIN—3,633 bbls, Savannah
TURPENTINE—470 bbls, Savannah

Savannah Domestic Receipts.

Week ending July 15.

ROSIN—13,176 bbls
TURPENTINE—5,441 bbls

Wilmington Domestic Receipts.

Two weeks ending July 15.

ROSIN—2,457 bbls
TAR—702 bbls
TURPENTINE—887 cks
CRUDE—1,388 bbls

New Orleans Domestic Receipts.

Week ending July 15.

BONES—105 bags
COTTONSEED—8,879 bags
PETROLEUM, CRUDE—1,206,748 gls, Port Arthur
TALLOW—4 bbls

San Francisco Domestic Receipts.

Week ending July 11.

OIL—11 pkgs, Sadler & Co, from N Y, via Panama
PAINT—20 pkgs, Bass-Heuter Paint Co, from N Y, via Panama
1 pkg, Louis Roesch Co, from N Y, via Panama
4 pkgs, from New York, via Panama
VARNISH—60 pkgs, Wagner Bros Co, from N Y, via Panama
1 pkg, R N H Nason, from N Y, via Panama

GOODS ON THE WAY TO THE UNITED STATES.

From Singapore.

TO NEW YORK.

E. R. Sutton, 3,000 bls Gambier.

TO THE UNITED STATES.

Stefano Razeto, 25,000 bgs nitrate soda.
Cuzco (ss), 4,000 tons nitrate soda.
Alex. Black, 16,000 bgs nitrate soda.
Pasqual Lauro, 14,000 bgs nitrate soda.
Santa Margherita, 3,000 tons nitrate soda.
Geronimo Bianchi, 1,200 tons nitrate soda.
Tourvilla, 3,000 tons nitrate soda.
Formosa, 2,400 tons nitrate soda.
Dugray de Trouin, 3,000 tons nitrate soda.
Lugano (ss), 5,000 tons nitrate soda.
Lota, 2,000 tons nitrate soda.
John Sanderson (ss), 2,500 tons nitrate soda.
Laomene, 2,800 tons nitrate soda.
Bracadale, 3,000 tons nitrate soda.
Cumbal (ss), 3,000 tons nitrate soda.
Capac (ss), 2,500 tons nitrate soda.
Hughenden (ss), 2,500 tons nitrate soda.
Coya (ss), 2,500 tons nitrate soda.
Hilbre, 2,700 tons nitrate soda.
Orontes, 1,900 tons nitrate soda.
Cedarbank, 4,400 tons nitrate soda.
Jolanda, 3,000 tons nitrate soda.
Condor (ss), 3,500 tons nitrate soda.
Queen Elizabeth, 2,800 tons nitrate soda.
Margherita, 1,600 tons nitrate soda.
Trafalgar, 2,600 tons nitrate soda.
Juanita North, 5,500 tons nitrate soda.
King Alfred, 2,500 tons nitrate soda.
Lady Joicey (ss), 4,500 tons nitrate soda.
Wynford, 3,200 tons nitrate soda.
Emmanuel Accorne, 3,500 tons nitrate soda.

RECORD OF VESSELS.

Sailed.

Port and Name.

SINGAPORE.

E. R. Sutton..... Loading June 3.

W. C. S. America.

Stefano Razeto.....Due July.
Alex. Black.....Due July.
Pasqual Lauro.....Due July.
Santa Margherita.....Due July.
Geronimo Bianchi.....Due July.
Tourvilla.....Due July.
Formosa.....Due July.
Laomeno.....Due July.
Lugano (ss).....Due August.
Lota.....Due August.
John Sanderson (ss)....Due August.
Bracadale.....Due August.
Cumbal (ss).....Due August.
Capac (ss).....Due September.
Hilbre.....Due September.
Orontes.....Due September.
Hughenden (ss).....Due October.
Cedarbank.....Due October.
Jolanda.....Due October.
Condor (ss).....Due October.
Trafalgar.....Due October.
Juanita North.....Due October.
Cuzco (ss).....Due November.
Margherita.....Due November.
King Alfred.....Due November.
Dugray de Trouin.....Due November.
Coya (ss).....Due November.
Lady Joicey (ss).....Due December.
Wynford.....Due December.
Queen Elizabeth.....Due January, 1904.
Emmanuel Accorne....Due February, 1904.

FOREIGN MAILS.

The following gives the date and time of closing the mails for foreign countries at the New York postoffice. The star indicates that letters may be addressed per steamer named for the countries indicated. The section indicates that registered mails close at 6 p. m. on the previous day. In case of mails via steamers from Pacific ports the hour of closing is up to the date specified.

After the closing of the supplementary transatlantic mails named below additional supplementary mails are opened on the piers of the American, English, French and German steamers, and will remain open until ten minutes of the hour of sailing.

Regular and supplementary mails close at foreign station half an hour later than closing time shown below (except that supplementary mails for Europe and Central America, via Colon, close one hour later at foreign station).

Mails for—	Steamer.	Date.	Mails close at P. O. Regular.	Suppl.
Barbadoes, British, Dutch and French Guiana and North Brazil	Marenhense	July 20..	12 m..	—
Europe, via Plymouth, Cherbourg and Bremen.	K. Wm. II	July 21..	9.30 a. m..	11 a. m.
Haiti*	Prins Wm. IV	July 21..	10 a. m..	—
Central America (except Costa Rica) and South Pacific ports*	Santiago	July 21..	9.30 a. m..	—
Europe, via Southampton*	St. Paul	July 22..	6.30 a. m..	—
Netherlands direct*	Amsterdam	July 22..	7.30 a. m..	—
Europe, via Queenstown	Majestic	July 22..	8.30 a. m..	10 a. m.
Denmark direct	Oscar II	July 22..	11 a. m..	—
Brazil, via Rio Janeiro	Grecian Prince	July 22..	12 m..	—
France, Switzerland, Italy, Spain, Portugal, Turkey, Egypt, Greece, British India and Lorenzo Marquez*	La Gascogne	July 23..	7 a. m..	—
Cuba	Monterey	July 23..	8 a. m..	—
Grenada, Trinidad and Ciudad Bolivar	Maracas	July 23..	10 a. m..	—
Mexico, via Tampico	Niagara	July 24..	12 m..	—
Porto Plata	(From Boston) Foxhall	July 24..	1 p. m..	—
Bermuda	(From Halifax) Steamer	July 24..	6.30 p. m..	—
Brazil, via Pernambuco, etc	Syracusa	July 25..	3.30 a. m..	—
Inagua, Haiti and Santa Marta	Athos	July 25..	11.30 a. m..	12.30 a. m.
Cuba, via Havana	Morro Castle	July 25..	10 a. m..	—
Newfoundland	Sylvia	July 25..	7.30 a. m..	—
Argentine Republic, Uruguay and Paraguay	Casilda	July 25..	5.30 a. m..	—
Cuba, via Havana	Olinda	July 25..	12.30 p. m..	—
Fortune Islands, Jamaica, Savanilla and Cartagena	Altai	July 25..	9.30 a. m..	—
Scotland direct*	Columbia	July 25..	7.30 a. m..	—
Europe, via Queenstown	Campania	July 25..	12.30 p. m..	2 p. m.
Belgium direct	Vaderland	July 25..	8 a. m..	—
Porto Rico, Curacao and Venezuela	Caracas	July 25..	8.30 a. m..	9.30 a. m.
China and Japan, via Seattle	Shinano Maru	To July 19..	6.30 p. m..	—
China and Japan, via Tacoma	Olympia	To July 28..	6.30 p. m..	—
§Philippine Islands, via San Francisco	U. S. Tr'sport	To July 27..	6.30 p. m..	—
§Hawaii, China, Japan and Philippines, via San Francisco*	Siberia	To Aug. 3..	6.30 p. m..	—
§Hawaii, via San Francisco	Alameda	To July 20..	6.30 p. m..	—
§Australia (except West), New Caledonia and Fiji Islands, via Vancouver and Victoria, B. C	Aorangi	To Aug. 15..	6.30 p. m..	—
§Australia (except West), New Zealand, Hawaii, Fiji and Samoan Islands and New Caledonia, via San Francisco	Ventura	To Aug. 1..	6.30 p. m..	—
§Tahiti and Marquesas Islands, via San Francisco	Mariposa	To Aug. 10..	6.30 p. m..	—
Hawaii, China, Japan and Philippines, via San Francisco	Nippon Maru	To July 26..	6.30 p. m..	—
§China and Japan, via Vancouver and Victoria, B. C	Emp. of India	To July 21..	6.30 p. m..	—

MAILS FORWARDED OVERLAND, ETC., EXCEPT TRANS-PACIFIC.

Cuba—By rail to Port Tampa, Fla., and thence by steamer, close daily, except Thursday, at §5.30 a. m. (the connecting mails close here on Mondays, Wednesdays and Saturdays).

MEXICO CITY—Overland, unless specially addressed for dispatch by steamer, close daily, except Sunday, at 1.30 p. m. and 11.30 p. m., Sundays at 1.00 .p.m. and 11.30 p. m.

NEWFOUNDLAND—By rail to North Sydney, and thence by steamer, close daily at 6.30 p. m. (connecting mails close here every Monday, Wednesday and Saturday).

JAMAICA—By rail to Boston, and thence by steamer, close at 6.30 p. m. Tuesday and Thursday.

MIQUELON—By rail to Boston, and thence by steamer, close daily at 6.30 p. m.

BELIZE, PUERTO CORTEZ and GUATEMALA—By rail to New Orleans, and thence by steamer, close daily, except Sunday, at §1.30 p. m. and §11.30 p. m. (connecting mail closes here Tuesdays at §11.30 p. m.).

COSTA RICA—By rail to New Orleans, and thence by steamer, close daily, except Sunday, at §1.30 p. m. and §11.30 p. m., Sundays at §1.00 p. m. and §11.30 p. m. (connecting mail closes here Tuesdays at §11.30 p. m.).

§REGISTERED MAIL closes at 6.00 p. m. previous day.

NOTE.—Unless otherwise addressed, West Australia is forwarded via Europe; and New Zealand and Philippines via San Francisco—the quickest routes. Philippines specially addressed "via Canada" or "via Europe" must be fully prepaid at the foreign rates. Hawaii is forwarded via San Francisco exclusively.

Trans-Pacific mails are forwarded to port of sailing daily, and the schedule of closing is arranged on the presumption of their uninterrupted overland transit.

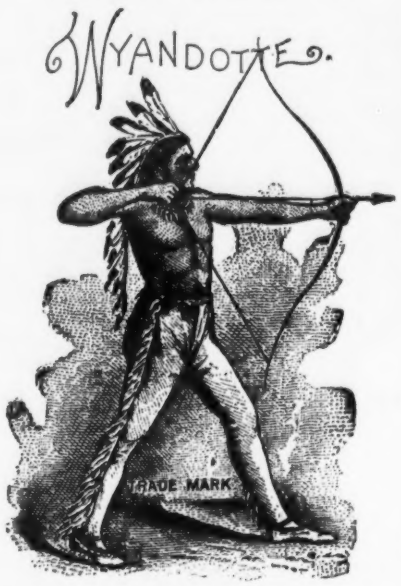
MERCK & CO. Headquarters for Medicinal Analytical and Technical
New York Chemicals

MICHIGAN ALKALI CO.

WYANDOTTE, MICH.

Manufacturers of

WYANDOTTE CHEMICALS



SODA ASH

48% to 58% (Light and Dense)

BICARB SODA

(Absolutely Pure).

CAUSTIC SODA

60% to 77 % (Special Soft Grades for Grinding).

Special Attention Given to Prompt Shipments and Spot Orders.

FOR PRICES, TERMS, ETC., APPLY TO

Edward Hill's Son & Co.,

71 PINE STREET, NEW YORK.

Sole Agents.

CABLE ADDRESS, "LYCURGIS," NEW YORK.

General Chemical Co.,

MANUFACTURING CHEMISTS,

HIGH GRADE Sulphuric, Muriatic, Nitric, Acetic ACIDS

FOR MANUFACTURERS OF STEEL, WIRE, OIL, RUBBER, LEATHER, TEXTILES, COLORS, CHEMICALS, Etc., Etc.

Aqua Ammonia, Special 98% and Mixed Acid for Explosives, Hydrofluoric Acid, C. P. Acids.

SULPHATE OF ALUMINA.

Crystal Alums, C. T. S. Filter Alums, High Test Salt Cake for Glass Manufacturers.

Calcined, Neutral and C. P. Glaubers' Salt, Acetates of Lead and Soda, Blue Vitriol, Copperas, Tin Crystals, Bisulphate of Soda, Muriates of Tin, Iron and Antimony, Nitrate Iron, Chloride of Zinc, Silicate of Soda, Roll Brimstone, Flour Sulphur, Etc., Etc.

NEW YORK OFFICES, 25 BROAD STREET.

Telephones, 3840, 3841, 3842 and 3843 BROAD.

HAVING WORKS IN ALL SECTIONS OF THE COUNTRY WE CAN GIVE BUYERS BENEFIT OF CONSIDERABLE SAVING IN FREIGHTS

CHEMICAL MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on pages 31 and 32.

Saturday Evening, July 18, 1903.

Trade in chemicals, considering the unsettled condition of the financial market, has been unusually good for this period of the year. Alkali is selling freely for forward, though rather quiet for prompt. Caustic is in limited stock and prices are firmer in all positions. Bleach is more or less unsettled as regards next year's contracts. Sal soda and bicarb both firmer. Cream of tartar and tartaric acid are both in limited supply and prices are tending upward. Blue vitriol is firmer, while arsenic is easier. Brimstone is dull and the same may be said of the potashes. Nitrate of soda is firmer, both here and on the coast. The other light chemicals and acids are all meeting with the usual demand, with few changes to note, as detailed below. Late mail advices from Liverpool say:—

"Heavy chemicals continue dull and unprofitable, the principal weakness still being bleaching powder; this article, however, is said to be meeting with rather a better inquiry for contracts over next year, though buyers and sellers are not yet in full accord as to prices. Ammonia, alkali and caustic soda move off in a restricted way at unchanged figures. It is persistently reported that a new chemical works is shortly to be started in Lancashire, but reliable details are not forthcoming. Fertilizers, while not exactly brisk, have been in fair demand, and a moderate spot business has resulted. Nitrate of soda is well held for prompt and near positions, spring deliveries being offered at a small discount. Sulphate of ammonia has ruled strong for June shipment, owing to scarcity of good quality, and, as many works are temporarily shut down, no great accumulation of stock can take place before the commencement of next season. There are numerous buyers for October-March at a discount of 20s. to 30s. per ton below current values, but no responsible sellers will entertain such bids, for, although sulphate of ammonia stands at a price that must satisfy the manufacturer, producers will not feel inclined to make any sacrifices so long as the relation of supply and demand maintains its present balance. Superphosphates are without change, and dried blood is still very scarce and dear. Sulphate of copper has been neglected, and fell away through lack of support; attention is now principally directed to operations over next season, but buyers and sellers are too far apart in their views to permit of much actual business."

Heavy Chemicals.

ALKALI.—Outside of the glass trade, which is always quiet during the period of shut down, trade has been unusually good. Deliveries to other consumers show no falling off, and in many cases additional sales are being made for prompt at 85c. for light, and 90c. for dense, f. o. b. works. For forward delivery further business is reported at 77½c. for light, and 82½c. for dense, and a shade less in bulk, f. o. b. works. In this section the usual jobbing demand prevails at 85@90c., as to test, make and seller.

BICARB SODA.—Better demand for the home trade, with more export inquiry. Stocks, however, are light, and makers are indifferent about selling too freely for forward. Prices remain steady at 1.35c. for ordinary in kegs and up, as to packing, and a shade less for bulk, and 3½c. and upward for extra grades, as to quantity and packing, less the usual discount terms.

CAUSTIC SODA.—The market remains firm under limited offerings, as stocks in excess of regular deliveries are very light. There is more demand for forward, and sales have been made at 1.65@1.75c., f. o. b. works, as to test and quantity. Powdered is in good request, both for prompt and forward, at 2⅝c. for 60 per cent., and 2⅞c. and up for higher tests, as to make, quantity and point of delivery.

SAL SODA.—There is more demand for prompt, and additional sales are being made to regular deliveries. As yet no change in prices has been made, but makers are offering in a limited way at .60c., f. o. b. works, and .70c. delivered in this section, less usual discount terms. Concentrated is selling freeely at 1.40c. and up for "Arm and Hammer," as to quantity and terms of sale. Foreign is held steady for July shipment at .67½c.

MONOHYDRATE CRYSTALS.—Further sales in addition to regular deliveries are reported for prompt at 1⅜c., and for "Snowflake" at 1¼c. f. o. b. works, as to quantity and terms of sale.

BLEACHING POWDER.—There is no change in the situation. What demand there is in excess of regular deliveries is satisfied by second hands, who are selling in a retail way foreign makes at 1.10c. and upward, as to quantity, test, make and seller. Domestic is quoted at 1c. f. o. b. works, as to make and quantity. Nothing new in 1904 contracts, prices for which have not as yet been made public.

Acids.

ACETIC.—The usual consuming demand prevails, with additional sales to regular contracts reported for July-August at 1.80c. and upward, as to test, quantity and style of packing.

MURIATIC.—Contract deliveries are of the usual proportions incident to this period of the year. Stocks are not excessive and prices are held steady at 1½c. and upward, as to strength and quantity.

OXALIC.—Only a small retail demand for store parcels at 5¼c. up to 5¾c., as to make and seller. Dock lots have been closed out at 5⅛c.

TARTARIC.—The market is firmer in all positions, with limited offerings of crystals at 31¼@31½c. and powdered at 31½@31¾c., as to quantity and terms of sale. Second hands are all sold up.

SULPHURIC.—Trade conditions remain the same as previously reported. Deliveries since the month opened show a further increase over the previous month. New business is unimportant and prices are steady for 66 deg. at 1.30c. and up, as to quantity and terms of sale.

Miscellaneous Chemicals.

ACETATE OF LIME.—Only a small jobbing trade reported outside of regular contract deliveries to the home trade and for export. Prices remain steady at .95@1c. for brown and 1.40@1.45c, for gray, as to quantity and point of delivery.

ALUM.—An improved demand reported all around, all of which tends to keep stocks low in makers' hands. Powdered is scarce and makers are behind with their orders. Prices remain firm at 1.75@1.80c. for lump, 1.85@1.90c. for ground, and 3c. and upward for powdered, as to make, quantity and terms of sale.

ARSENIC.—The market is easy, with second hands selling in a jobbing way at 3c., though others are holding for 3.10@3.25c., as to make and quantity. For forward delivery there is only a limited demand, with Spanish quoted at 2⅞@3c., and other makes at 3@3 1-16c., as to quantity and date of shipment. Red is selling in a jobbing way at 6¾@7c., as to grade and seller.

BLUE VITRIOL.—The market is firmer and makers are offering regular goods in a limited way at 4¾c. for car lots delivered at Eastern points, and jobbing parcels at 5c. and up, as to quantity. Second hands are selling in a jobbing way at 4¾c. and up, as to make and size of the order.

BRIMSTONE.—There is not demand enough to test the market. The arrivals have been free and spot parcels are held at $22.50, and shipments at $22@22.25, as to quantity and dates of arrival.

CHLORATE OF POTASH.—Only a small retail demand for powdered at 7¼@7½c., and crystals at 7¼@7⅜c. for spot parcels. Car lots are quoted at 7@7¼c., as to point of delivery and terms of sale.

CHLORATE OF SODA. — Nothing new since our last. In the absence of any important demand prices are nominal at 7½c. for spot and 7¼@7⅜c. for July forward, as to make and quantity.

CARBONATE OF POTASH.—There is no change in the situation, which remains a dull one with prices nominal at 3⅛c@4¼c. for calcined, and 4@4¼c. for hydrated, as to test, quantity and seller.

CREAM OF TARTAR.—No change as yet has been made in prices by makers, who are quoting 25c., but a few stray lots of powdered might be picked up at 24¾c.

COPPERAS.—Rather more demand and additional sales to regular deliveries for prompt are reported at 47½c. for bulk and 52½c. for bbls., in car lots.

GLAUBER'S SALT. — With stocks not excessive makers are offering only in a limited way at 80c. for car lots, and 85c. and up for jobbing parcels.

NITRATE OF SODA.—The market is steady, with limited offerings from dock at 2@2.05c. July forward is held firm at 2c. Cables report a higher market on the West Coast.

SAL AMMONIAC.—The usual jobbing demand prevails for spot and nearby parcels at 5⅞@6c. for either domestic or foreign white grain. Lump is quiet but steady at 9¼c. up to 9¾c., as to grade.

SUGAR OF LEAD.—Contract deliveries since the month opened show a further increase. Stocks are light and prices are held firm at 6¾@7c. for

Established by JAMES LEE, in 1825.

JAMES LEE & CO.

COMMISSION MERCHANTS

76 WILLIAM STREET

NEW YORK

SOLE AGENTS IN THE UNITED STATES FOR

CHARLES TENNANT & CO.

WHITE ARSENIC

Mined and Manufactured by

GIRONES & HENRICH

BARCELONA, SPAIN

TRADE MARK.

This Arsenic analyzes 99.80 % Arsenious Oxide, and is the purest and whitest made.
Contracts for supplying in any quantity.
Orders filled promptly from New York stock.
Quotations for spot and forward delivery.
Obtain prices and particulars before buying; from

BINNEY & SMITH CO.

81-83 Fulton St., New York City

Sole Selling Agents for the United States and Canada.

Established 1865.

FERGUSSON BROTHERS, Philadelphia, Pa.

BLUE VITRIOL

OUR SPECIAL LINES ARE:

FOR CHEMICAL WORKS. Chrome Ore, Lump, Rock and Alluvial, 50 to 56 per cent. Manganese Ore (every grade), Molybdenite Bauxite, Carb. Barytes, Fluorspar, etc.

FOR GLASS, POTTERY AND ELEC. WORKS. Chromate of Iron, Graded and Levigated Specially Manganese, high grade, China and Ball Clay, Fluorspar and Feldspar, "Blackwell's Opal Brand" for Opal.

FOR RUBBER, PAPER AND SOAP WORKS. Talc, Soapstone, "Angel White" Brand, Asbestine, Sulphate Barytes, Bauxite, Bog Ore, Keiselguhr, Rottenstone, Ground Pumice, Quartz, Silex, &c. All Alloys, Metals, Minerals, Chemicals and Colors.

No orders too large for our capacity. No orders too small to receive prompt attention.

Geo. G. Blackwell, Sons & Co., Ltd. THE ALBANY, LIVERPOOL, ENG.

Metallurgists, Merchants and Manufacturers.

Works: Garston Docks. Cable Address: Blackwell Liverpool. Codes: A. B. C., Morning & Neal, Lieber's, Western Union

BLEACHING POWDER and BROMIDS

THE DOW CHEMICAL CO., • Midland, Mich.

THE GRASSELLI CHEMICAL CO.

ESTABLISHED 1839.
GENERAL OFFICES AND PRINCIPAL WORKS
CLEVELAND, O.

MANUFACTURERS OF

Mixed Acid, Nitric Acid, Muriatic Acid, Sulphuric Acid, C. P. Glycerine, Lithopone, Blue Vitriol, Sal Soda, Aqua Ammonia, Sal Ammoniac, Glauber's Salt, Sulphate of Zinc, Acetate of Lead White and Brown, **Hyposulphite of Soda.**

SILICATE OF SODA, ACETIC ACID, ACETATE OF SODA, ETC., ETC.

Salt Cake for Glass Makers. Chloride of Zinc Solution, Fused and Granulated. Strictly Chemically Pure Acids and Aqua Ammonia.

Branch Offices and Works:—St. Louis, Mo.; St. Paul, Minn.; Olean, N. Y.; Cincinnati, O.; Titusville, Pa.; East Chicago, Ind.; Beaver Falls, Pa.; Boughton, Pa.; Milwaukee, Wis.; Birmingham, Ala.; New Orleans, La.; Fortville, Ind., etc., etc.

New York Works, Tremley, N. J. **New York Office, 63-65 Wall Street**

brown, and 8⅝@8⅞c, for white crystals, as to quantity and terms of sale.

SALTPETER.—Only a small jobbing demand for spot crude at 3.40c. from dock. Refined is unchanged at 4¼@5¼c., as to grade and quantity.

Ammoniates, Potashes, Etc.

The market for the leading ammoniates has been rather quiet during the week, and prices generally may be quoted easier though not lower. Tankage is quiet but steady at $2.25 and 10 f. o. b. Chicago for high grade ground Blood is firmer at $2.45@2.50 f. o. b. Chicago. Fish scrap is quiet and prices are a shade easier at $2.45 and 10 for dry, and $2.15 and 35 for acid fish f. o. b. factory. Sulphate of ammonia is offered rather more freely for nearby arrival at $3.15, and for July-August shipment at 3.12½. Bone meal still scarce and held at $18 for steamed, and $19.50 for raw f. o. b. Chicago.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

English Petroleum Markets.

London.—This market seems to have pursued a very erratic course during the month of June—at one time dull and lifeless, with prices all but stationary; at another rather active, with quotations springing upward, and so on until the very close. American refined, which has been arriving more abundantly, had undergone scarcely any change in value, and for a long while continued to be operated in at 5⅝d. to 5¾d. per gallon, with a fraction over for deliveries up to the end of the year; but lately (or this week) there has been a smart rise to 5⅞d. to 6d. Roumanian oil, after offering at 4½d. to 4¾d., suddenly rose to 5½d. per gallon, the present value on the spot; and Russian oil, which has been as low as 4d. to 4¼d., a week subsequently recovered a little, and with a further reaction finally sells at 4⅜d. to 4½d., or ¼d. per gallon above the figures quoted on the 5th ult. Water white oil remained at 7⅝d. to 7¾d. till quite recently, when it commanded 7⅞d. to 8d. Petroleum spirit likewise has all at once risen to 6½d. to 7½d. for ordinary, and as much as 1½d. per gallon to 9½d. to 10d. for rectified.

Importations of petroleum oil, etc., (in barrels), during the first six months of 1903 and 1902:—

1903.	London.	Liverpool.	Bristol.
American	846,478	350,609	167,972
Russian	736,114	526,508	40,701
Roumania	129,810	.....	.....
Borneo	43,575	.....	.....
Totals	1,755,977	877,117	208,673
1903.	Hull.	O. P.	Totals.
American	114,413	114,540	1,594,012
Russian	96,143	44,325	1,443,791
Roumania	.....	.....	129,810
Borneo	3,500	.....	47,075
Totals	214,056	158,865	3,214,688
1902.	London.	Liverpool.	Bristol.
American	1,362,095	459,345	251,908
Russian	471,565	255,981	.....
Roumania	60,582	13,026	.....
Borneo	52,258	.....	.....
Totals	1,946,500	728,352	251,908
1902.	Hull.	O. P.	Totals.
American	178,425	163,974	2,415,747
Russian	53,456	67,032	848,034
Roumania	.....	.....	73,608
Borneo	.....	.....	52,258
Totals	231,881	231,006	3,389,647

The official imports of each kind of petroleum (in gallons) into the U. K. this year to the end of May were:—

	1903.	Month of May. 1902.	1901.
*Crude, gals.	.....		
*Lamp oils, gals	13,507,273		
*Spirit, gals.	440,530	*No separate returns given.	
Lubricating oils, gals.	4,259,935		
*Gas oils, gals.	3,569,650		
*Fuel oil, gals.	4,626		
Total, gals.	21,782,014	40,096,569	23,193,263
	1903.	First Five Months of— 1902.	1901.
*Crude, gals.	2,021,799		
*Lamp oils, gals	69,631,676		
*Spirit, gals.	1,872,107	*No separate returns given.	
Lubricating oils, gals.	17,589,018		
*Gas oils, gals.	18,603,855		
*Fuel oil, gals.	2,756,496		
Total, gals.	112,475,851	143,601,279	107,559,960

Liverpool.—The business reported has been restricted to actual trade requirements, but there is an undercurrent of strength in the position, and expectations of higher prices are likely to be realized. For the moment, however, the market is in a listless condition. American refined rules at 6½d. to 8½d. according to brand, and Russian refined at 4⅞d. to 6⅛d. Petroleum spirit is steady, with a moderate inquiry for American deodorized at 9d. to 1s. 2d. —Oil Trade Review.

"DOW" BLEACHING POWDER : :

MANUFACTURED BY

The Dow Chemical Co.

MIDLAND, MICH.

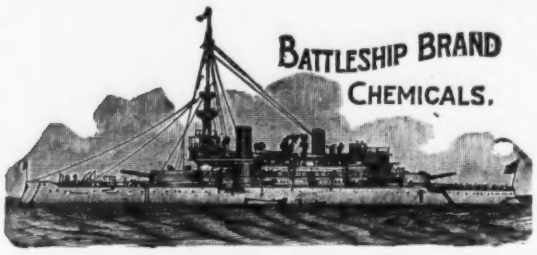
SOLE SELLING AGENTS

EDWARD HILL'S SON & CO.

71 PINE STREEET,

NEW YORK.

AMERICAN BLEACHING POWDER

Caustic 

Soda.

TRADE MARK.

Manufactured by the **DRY ELECTROLYTIC PROCESS** at Niagara Falls by

ACKER PROCESS COMPANY.

78 and 79 per cent. CAUSTIC.

NEW YORK AND LIVERPOOL TEST.

For Further Particulars, Prices, Etc., apply to

GENERAL CHEMICAL CO. **25 Broad St., New York.**

SOLE AGENTS.

Pure Alkali.

Manufactured by the Ammonia Process.

This Alkali contains 58 per cent. of Alkali or nearly 99 per cent. of Carbonate of Soda. It is the most economical form of soda for manufacturers of Soap, Glass, Paper, Wood Pulp and Colors, and for Printers and Bleachers.

MANUFACTURED BY

BRUNNER, MOND & CO., Limited,

NORTHWICH, ENGLAND,

AND

SOLVAY PROCESS CO.,

Syracuse, New York.

THE SOLVAY PROCESS CO. will make by this same process an Alkali adapted for Window Glass Makers, testing 48 per cent.

WING & EVANS,

Sole Agents for the United States. **22 William St., New York.**

HELLER, HIRSH & CO.,

COMMISSION MERCHANTS AND BROKERS.

Main Office:
62 & 64 William St.,
NEW YORK.

BRANCH OFFICES:
411 E. Lombard St., Baltimore, Md.
143 N. Front St., Philadelphia, Pa.
233 La Salle St., Rooms 99-100, Chicago, Ill.
Brown's Wharf, Charleston, S. C.
Boston Building, Kansas City, Mo.
No. 28 N. Groeninger St., Hamburg, Ger.

Potash Salts : Fertilizer Materials : Aqua and Anhydrous Ammonia

NATRONA CHEMICALS

NATRONA BI-CARB SODA—It is absolutely pure and the only Soda made from Kryolith. Best for Medicinal, all Family and Baking Powder Purposes.

NATRONA POROUS ALUM—(For Paper Makers and Dyers. 60 per cent stronger than other Alum.)

NATRONA LUMP AND GROUND ALUM—(For Drug and Grocery Trade.)

NATRONA SAL SODA, CAUSTIC SODA, COPPERAS, SULPHURIC, MURIATIC AND NITRIC ACIDS, BLUE VITRIOL, CHLORIDE CALCIUM, FLUORIDE CALCIUM, ALUMINA SAPONIFIER LYE, LEWIS 98 PER CENT. POWDERED AND PERFUMED LYE, POTASH, &c.

MANUFACTURED BY THE

PENNA. SALT MFG. CO. 115 CHESTNUT ST., PHILADELPHIA, PA.

147 Nassau Street, New York. 323 North Second Street, St. Louis. 19 & 21 Wabash Avenue, Chicago.

WING & EVANS,

Commission Merchants,

22 WILLIAM STREET, NEW YORK.

Soda Ash, Sal Soda, Caustic Soda, Bleaching Powder

AGENTS FOR

BRUNNER, MOND & CO., Ltd., Northwich, Eng.

SOLVAY PROCESS CO., Syracuse, N. Y.

Hollingsworth & Peterson

PHILADELPHIA, PA.

Sole Agents for J. L. & D. S. Riker, of N. Y.
(FOR PHILADELPHIA AND VICINITY)

For the Sale of the Various Brands of

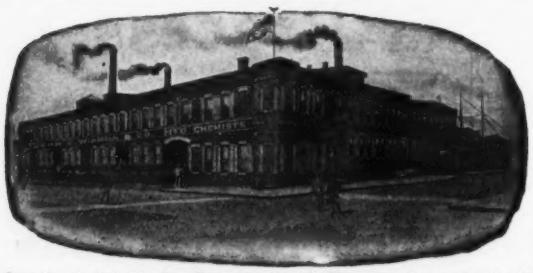
BLEACHING POWDER

MANUFACTURED BY

The United Alkali Co., Ltd., of Great Britain.

JOHN C. WIARDA & CO.

Factories: Green, Provost & Freeman Sts., BROOKLYN, N. Y.



CHEMICALS

For Manufacturers of

Glass, Pottery, Varnish, Steel, Oil, Leather, Rubber and Textiles, Nickel and Electro Platers, &c.

Manganese, all kinds
Cyanide of Potash

Oxalic Acid, Hydrofluoric Acid, Borax, Boracic Acid, Arsenic, Bone Ash, Muriate of Ammonia, Fluoride of Ammonia, First Sorts Potash, Aqua Ammonia, China Clay, Glauber Salt, Sal Soda, Caustic Soda, 98%, Italian Pumice Stone, lump and powdered.

BOTANICAL DRUGS, &c.

THE SOLVAY PROCESS CO.'S CHLORIDE OF CALCIUM

SOLID IN DRUMS — FUSED IN BARRELS

PRACTICALLY CHEMICALLY PURE — COMPOSITION GUARANTEED

HIGHEST POSSIBLE PERCENTAGE OF CALCIUM CHLORIDE

FOR CIRCULAR "O", PRICES, SAMPLES, ANALYSES, ETC., ADDRESS

THE CARBONDALE CHEMICAL CO.

GENERAL SELLING AGENTS, CARBONDALE, PA.

BI-SULPHIDE OF CARBON

In Drums.

E. R. TAYLOR,

MANUFACTURER,

PENN YAN, N. Y.

Bicarbonate Potash
Bicarbonate Soda
Sal Soda Epsom Salts

DIAMOND SODA WORKS,

Milwaukee, Wis.

The AMERICAN CHEMICAL CO.

CINCINNATI, O.

SAL SODA	GLAUBER'S SALT
CAUSTIC SODA	BICARBONATE SODA
SODA ASH	SALERATUS
SODA POWDER	BLEACHING POWDER
SODUXITE	CARBONATING POWDER

POWDERED CAUSTIC SODA

ALBANY CHEMICAL CO.,

ALBANY, N. Y.

Manufacturers of

Amyl Acetate, Refined Fusel Oil, Patent Collodion Solvent, Chloroform, Sulphuric Ether, Etc., Etc.

BELLHOUSE, DILLON & CO.,

30 St. Francois Xavier St., MONTREAL.

Offer Canadian POTASHES, Inspected by Government Officer and Guaranteed Free from Salt.

ENQUIRIES SOLICITED.

MERRIMAC CHEMICAL CO.

75 and 77 Broad Street, BOSTON, MASS.

MANUFACTURERS OF

Oil Vitriol,	*Sulphate of Alumina,*	*Bi-Sulphite of Soda,*
Muriatic Acid,	*Chloride of Alumina,*	*Hypo-Sulphite of Soda,*
Nitric Acid,	*Hydrate of Alumina,*	*Tin Crystals, Etc.*
Acetic Acid,	*Acetate of Alumina,*	*Aqua Ammonia,*
Acetate of Soda,	*Glauber's Salt,*	*Wood Alcohol,*
Alum,	*Sulphate of Soda,*	*Colors.*

Incorporated 1863. Proprietors of Wm. H. Swift & Co.'s Works

PLEASE WRITE FOR CATALOGUE.

HAMILTON H. SALMON & CO.

88 Wall Street, New York.

IMPORTERS, EXPORTERS and COMMISSION MERCHANTS.

Fertilizer Materials and Chemicals for Manufacturing Purposes of all descriptions. Specialties: Muriate of Potash, Double Manure Salt, Sulphate of Potash, Kainit, Sylvinit, and other products of the Stassfurt Mines.

CORRESPONDENCE SOLICITED.

Samples and Information upon Application.

LINDER & MEYER

89 STATE STREET, BOSTON.

Representing WING & EVANS OF NEW YORK,

FOR THE SALE OF

48% and 58% Pure Alkali and Caustic Soda 74% and 76%

MANUFACTURED BY

BRUNNER, MOND & CO., LTD., England. SOLVAY PROCESS CO., Syracuse, N. Y.

Manufacturers, Large Dealers the World Over Read the OIL, PAINT AND DRUG REPORTER

CHURCH & DWIGHT CO.

ARM & HAMMER

Manufacturers of the above WELL KNOWN BRANDS, best in the World.

COW BRAND

SUPER CARB SODA

BI-CARB SODA AND SALERATUS.

MANUFACTURERS, 63 & 65 WALL ST NEW YORK.

ALSO SAL SODA, CONCENTRATED SALSODA AND MONO-HYDRATE.

THE PUREST AND BEST, QUALITY AND WEIGHT, ALWAYS GUARANTEED.

ZENITH CARBONATING POWDER.

FOR BOTTLERS USE AND MANUFACTURERS OF CARBONATED WATERS.

MORE ECONOMICAL AND PURER THAN MARBLE DUST OR WHITING.

Columbia Chemical Company

BARBERTON, OHIO,

..Manfacturers of..

Soda Ash

(48% to 58%) in all densities.

Caustic Soda

(60%, 70%, 72%, 74%, 76%, 77%)

For Quotations, etc., apply to

ISAAC WINKLER & BRO., = Cincinnati, Ohio

Sole Agents.

The Mathieson Alkali Works

SALTVILLE, VA.

Manufacturers of Eagle and Thistle Brands of

Pure Alkali, 58%
Soda Ash, 48%
Caustic Soda, 70%, 72%, 74%, and 76%

THE CASTNER ELECTROLYTIC ALKALI CO.

NIAGARA FALLS, N. Y.

Manufacturers of

Bleaching Powder and Caustic Soda 99% Pure

Quotations promptly furnished for Spot or Forward Delivery

ARNOLD, HOFFMAN & CO., Inc.

SOLE AGENTS,

Providence. New York. Boston. Philadelphia.

GOLD MEDAL

Pan-American Exposition, Buffalo, 1901.

AWARDED TO

THE HELLER & MERZ CO.

NEW YORK, CHICAGO, PHILADELPHIA, BOSTON.

TRADE MARK — AMERICAN ULTRAMARINE WORKS

MANUFACTURERS OF

Ultramarine, Aniline Colors.

BALL BLUE and BARREL PAINT

SOLE AGENTS FOR

"PONOLITH"

American Lithopone of Superior Quality.

SAMPLES, PRICES AND INFORMATION FURNISHED ON APPLICATION.

THOMSEN CHEMICAL COMPANY

BALTIMORE, MD.

Manufacturing Headquarters for

PHOSPHATE SODA, (Medicinal and Technical)
PHOSPHATE AMMONIA, EPSOM SALT
SULPHATE ZINC
C. P. and COMMERCIAL ACIDS (all kinds) Etc., Etc.

SEND FOR CATALOGUE.

Cochrane Chemical Co.

55 Kilby Street, Boston, Mass.

——MANUFACTURERS OF——

OIL VITRIOL	AQUA AMMONIA	ALUM
MURIATIC ACID	SULPHATE AMMONIA	POROUS ALUM
NITRIC ACID	SAL AMMONIAC	SULPHATE ALUMINA
AQUA FORTIS	SULPHATE SODA	CHLORIDE ALUMINA
ACETIC ACID	BISULPHATE SODA	WOOL CARBONIZERS
TIN CRYSTALS	BISULPHITE SODA	NITRATE IRON
MURIATES OF TIN	HYPOSULPHITE SODA	NITRATE COPPER
GLAUBER'S SALT	SULPHIDE SODA	CHLORIDE ZINC
EXTRACT INDIGO	STANNATE SODA	IRON LIQUORS

OXY MUR, ANTIMONY AND OTHER CHEMICALS.
ELECTROLYTE OR STORAGE BATTERY SOLUTION.

Business Founded 1849. Works at EVERETT, MASS.

JOHN D. LEWIS,

MANUFACTURER OF

DYEWOODS and EXTRACTS

Importer of DYESTUFFS and CHEMICALS,

3 & 4 Exchange Place WORKS: Charles and Bank Sts. Providence, R. I.

F. BREDT & CO.,

IMPORTERS AND MANUFACTURERS OF

Aniline Colors, Tannic Acid, White and Brown Sugar of Lead.

Tartar Emetic, Antimony Salts, Gum Tragacanth, Gambier, Olive Oil Soap, Olive Oil, Gall Extract, China Galls, Lemon Juice and Acetine.

194 FULTON ST., NEW YORK 12 S. FRONT ST., PHILADELPHIA.

DYE MARKET.

NOTE.—Our prices are for large lots except when otherwise specified, and buyers of small quantities must expect to pay an advance on these figures. Complete prices current will be found on page 32.

Saturday Evening, July 18, 1903.

There was an air of quiet, if not of dullness to the market and there was nothing approaching interest in any line, demand being confined to the small quantities required for immediate needs. Gambier moved rather slowly, but remained steady at about last week's prices. Aniline oil and salt were inactive. Yellow prussiate of potash was firm at higher figures, in sympathy with previously noted conditions. Indigo was steady owing to some scarcity, particularly of low grade Bengal. Advices from Calcutta report favorable weather. Albumen was quiet and without special feature. Starch and dextrine were unchanged and steady. Tartar emetic, tin crystals and zinc dust were steadily held at former prices.

ACID, GALLIC.—A steady and unchanged market prevails for gallic acid and former quotations of 41½@47c., as to strength and quantity, are still current.

ACID, TANNIC.—The market for tannic acid is firm, in sympathy with the position of the crude material, but there has been no noteworthy change in the situation and quotations still range as follows:—Commercial, 30@35c.; crystals, 55@60c., as to quantity and seller.

ALBUMEN.—Market conditions remain unchanged and there is no new feature to report. Demand, both in the local market and at outside points, is quiet. This applies with equal force both to egg and blood albumen. Prices are without quotable change and are repeated, as follows:—Egg albumen, Chinese, 45@50c.; European, 50@70c.; blood albumen, 13½@17c., as to quality, quantity and seller.

ALIZARINE.—The market remains from quiet to steady and without special feature, upon the basis of previous quotations of 15½@16½c., for red paste.

ANILINE OIL.—Demand continues moderate and the market is barren of any special feature, aside from the fact that goods are obtainable at 8¾@9c., as to quantity.

ANILINE SALT.—The same conditions which marked the situation as regards aniline oil, may be applied also to aniline salt. Demand is not large and quotations of 8½@9c., as to quantity, are still current.

BICHLORIDE OF TIN.—The situation of bichloride of tin, as of all tin solutions, continues uninterruptedly quiet, and the market attracts no attention beyond moderate demands for current requirements. The market is unchanged on the basis of previous quotations of 9¼@9½c. for 50 deg. and 12½@13c. for 60 deg., as to quantity.

BICHROMATES.—The market is barren of any new feature. Trade has been rather quiet in keeping with the general condition of the market. Prices are unchanged and are repeated, upon the basis of previous quotations, as follows:—Bichromate of potash, 8¼@8½c.; bichromate of soda, 6¼@6½c., as to quantity.

CUTCH.—Demand continues light, as usual, and the market offers nothing new. Quotations are without change as follows:—Mat, 5@5½c.; refined, 5½@6c.; refined, in boxes, 6@6½c.; slabs, in boxes, 9@10c. The shipments from Rangoon from Jan. 1 to June 29, to all parts, were 3,870 tons, against 2,200 tons in 1902, and 2,770 tons in 1901.

DEXTRINE.—So far as heavy purchases are concerned, buyers have been rather shy of the market, which offers little in the way of new feature. Prices are steady, but without change, on the basis of former quotations, as follows:—Imported potato dextrine, 5¼@8c.; corn dextrine, 3¾@4c., as to quality and quantity.

DIVI-DIVI.—The situation remains dull and uninteresting, and exactly as previously reported. The market may be quoted easy at old figures of $45@50 for goods from store, as to quantity, condition and holder.

GAMBIER.—While there has been no large movement this week, the market has remained steady at former quotations, based on 5¾@6¼c. for goods from store, as to quantity, condition and holder. As noted in our last report, the steamers Richmond Castle and Indramayo have finished discharging. The 7,863 bales on the Indrani are just being unloaded now. Goods, ex-dock, are quoted at 5½@5.55c., as to owner. Singapore, we are told, offers June-August shipment at 5.55@5.60c., and far-off at 5½c. The steamer Sagami, due next month with a large lot, is quoted at about 5.60c. The shipments from Singapore to all parts, during the period from Jan. 1 to July 15, were as follows:—

	1903. Tons.	1902. Tons.	1901. Tons.
To the United States..	9,085	7,900	7,420
To Great Britain.....	4,830	5,490	7,295
To the Continent.....	3,240	2,580	3,380
Totals	17,155	15,970	18,095

HYPOSULPHITE OF SODA.—The market for hyposulphite of soda is quiet and attracts little attention. No changes have been made nor do any seem to be in contemplation. Business continues to be of rather a jobbing kind, at prices which are repeated, as follows:—American, in casks, 1.60@1.65c.; in kegs, 1.70@1.75c.; German, in casks, 1.70@2c.; in kegs, 1.90@2.30c.

INDIGO.—Stocks of all grades in dealers' hands are very small at present, and this is particularly true with regard to Bengal. No kurpah or dry leaf is coming in from Madras and no offers are being made, Suez and Japan taking the little that is available. Prices are as follows:—Bengal, low grade, 70@75c.; medium, 75@85c.; high grade, 90c.@$1.10; Kurpahs, medium to good, 60c.; higher grades, 65@75c.; Guatemala, 55@75c.; Manilla, 48@55c. Moran & Co.'s Calcutta circular says: "There has been further good rain in Bahar, and with favorable weather Mahai will probably commence within the next ten days. Latest reports from the Benares and Northwest districts are somewhat more favorable, and we hear of rain having fallen during the week.

NUTGALLS.—There is a continued firm feeling in the market for Chinese galls in sympathy with advices from primary sources, but there is little or no demand either for this or the blue Aleppo kinds. Quotations are unchanged at 12½@12¾c. for blue aleppo, and 13@13½c. for Chinese.

PRUSSIATES.—Yellow prussiate of potash is very firm and higher, no goods being obtainable on spot under 14c., while up to 14¼c. is asked, as to quantity and seller. Supplies are light, both here and abroad. There are no new features to report regarding red prussiate of potash, which is held at 37@38c. Prussiate of soda is unchanged at 9¼@9⅞c., as to quantity.

STARCH.—Market conditions have varied but little, if any, from previous reports. There has been a fairly good demand for corn starch, and the market for this and other kinds is firm and unchanged quotations, which are repeated as follows:—Corn pearl, in barrels, 2.35@2.37c.; in bags, 2¼@2.27c., as to brand and quantity; potato starch, 3½@5½c.; rice, 7@9c., and wheat, 5¼@6c.

SUMAC.—Conditions are without material change. Demand is limited, but the market remains steady at unchanged prices, which are repeated, as follows:—Sicily, No. 1, $47@50; No. 2, $45@48; Virginia sumac, $33@34, as to quantity and quality.

TAPIOCA AND SAGO FLOUR.—There is no very great demand for these articles, but the market holds fairly steady at former quotations of 2¼@3c. for tapioca flour and 1¾@2c. for sago flour, as to quality and quantity.

TARTAR EMETIC.—The market is quiet, but the firmness noted for some time past still continues in sympathy with the position of the raw material. Quotations of 21@22c., as to holder, are still current.

TIN CRYSTALS.—There is no change in the situation. Demand continues rather small but steady, and prices are firm at 23c. for barrels, 23½c. for kegs, and 24½c. for jars.

ZINC DUST.—There is no particular feature to report. Demand is steady but does not involve large lots. Quotations of 4¾@5c., as to quantity, are still current and firm.

Parties desiring to be brought in contact with concerns who offer bargains in machinery are respectfully referred to page 27 of this issue.

If you desire to be brought in contact with the makers of machinery which enters into the manufacture of chemicals, drugs, paints, dyestuffs, fertilizers, naval stores, varnish, white lead, cotton oil, linseed oil, lubricating oil, etc., we would respectfully refer you to the Machinery Department of this publication, which you will find on page 23. Any special information that may be desired will be gladly furnished upon application, for we are in a position to place prospective purchasers in direct communication with the manufacturers of machinery of all kinds.

JACQUES WOLF & CO.

FABRIQUES DE PRODUITS CHIMIQUES

A. DeRONDE & CO., Agents. 228 Front St., New York. PASSAIC, N. J.

PHOSPHORUS

SULPHURIC ACID
MURIATIC ACID
NITRIC ACID
AQUA FORTIS
ACETIC ACID
GLAUBER SALTS
HYPOSULPHITE SODA
CHLORIDE ZINC

Address,
GENERAL CHEMICAL CO.
Philadelphia Office 608 BOURSE BLDG., PHILADELPHIA, PA.

HOLLINGSWORTH & PETERSON, BROKERS IN CHEMICALS

653 Bourse, PHILADELPHIA, PA.

Representing WING & EVANS, OF NEW YORK.

FOR THE SALE OF

PURE ALKALI, 48, & 58 per cent.

SAL SODA, CAUSTIC SODA, 60, 70, & 74 per cent.

MANUFACTURED BY

BRUNNER, MOND & CO., Ltd., England. SOLVAY PROCESS CO., Syracuse, N. Y.

Patents Granted.

731,670—YELLOW MONOAZO DYESTUFF AND PROCESS OF MAKING SAME. Walter Dollfus and Rudolf Hagenbach, Hochst-on-the-Main, Germany. Filed April 11, 1903. Issued June 23, 1903.

731,723—QUICK - VARNISH COMPOSITION. Gustav Tuschel, Odessa, Russia. Filed Nov. 25, 1902. Issued June 23, 1903.

731,736—METHOD OF EXPRESSING OIL FROM SEEDS. Valerius D. Anderson, Cleveland, Ohio. Filed May 2, 1902. Issued June 23, 1903.

731,746—PROCESS OF MAKING SODIUM OXID. Augustus Bischler, Basle, Switzerland. Filed Oct. 25, 1902. Issued June 23, 1903.

731,773—NON - REFILLABLE BOTTLES. Charles J. Gustaveson, Salt Lake City, Utah. Filed Oct. 22, 1902. Issued June 23, 1903.

731,799—DISTILLING APPARATUS. Walter E. Lummus, Lynn, Mass. Filed Aug. 1, 1901. Issued June 23, 1903.

731,852—NON-REFILLABLE BOTTLE. Henry F. Buttner, Idaho Falls, Idaho. Filed Oct. 4, 1902. Issued June 23, 1903.

731,854—NON-REFILLABLE BOTTLE. Robert Byers, New York, N. Y. Filed March 18, 1903. Issued June 23, 1903.

E. J. BEGGS & CO., 101 & 103 Beekman St., NEW YORK.

Dry Bisulphite Soda	Bisulphite Potash
Bisulphite Soda Sol.	Sulphurous Acid
Bisulphite Lime Sol.	Sulphur Strips
Dry Sulphite Lime	Flour Sulphur
Roll Brimstone	Sulpho Carbolic Disinfecting Powder

EXTRACTS and CARMINES
—OF—
INDIGO.
TAYLOR & BARKER,
Manufacturing Chemists, LOWELL, MASS.

NITRATE OF SODA
THE STANDARD AMMONIATE
should be freely used in mixed fertilizers. Fertilizer users are rapidly learning the value of Nitrate, are demanding it, and are buying the fertilizers that give it to them.
For information address
WILLIAM S. MYERS, Director,
Chilian Nitrate Works, Room 214, 12 John St., New York.

Chemical Stoneware
FOR CHEMISTS and MANUFACTURERS.
Please give specifications when asking for prices.
ARTHUR J. WEEKS, Akron, Ohio.

Koenigswarter & Ebell
Chemical Works,
LINDEN-HANNOVER, GERMANY.

Acid Benzoic.
" Chromic.
Ammonium Oxalate.
" Phosphate
Persulphate.
Antimony Oxide.
" Salt, 24, 38, 47, 60, 65%.
Barium Chloride.
" Chromate.
" Nitrate.
" Peroxide.
Caustic Potash and Soda, pure, in lumps and sticks.
Chromic Oxide.
Copper Chloride.
Fluorides.
Formaldehyde.
Lead Nitrate.
Manganese Chloride.

Metals for Steel Manufacture--
Chrome Metal.
Manganese Metal.
Molybdenum Metal.
Tungsten Metal
and Alloys.

Nickel Sulphate.
Potash Meta-Bisulphite.
" Permanganate.
Phosphoric Acid, Chemically Pure.
Russian Birch Oil.
Siccatiffs for Varnish.
Sodium Sulphide, Concentrated.
Strontium Nitrate.
Sulfocyanides.
Tungstate of Soda.
Zinc Sulphide.

The Sharpless Dyewood Extract Co.
MANUFACTURERS OF
DYEWOODS AND DYEWOOD EXTRACTS
Office: 648, 650 & 651 Philadelphia Bourse.
Works, CHESTER, PA. Warehouse, 22 North Front Street.

Berlin Aniline Works.
MAIN OFFICE:
124 Pearl St., Boston, Mass.
213-215 WATER STREET, NEW YORK CITY.
208 Kinzie Street, Chicago, Ill.
122 Walnut St., Philadelphia, Pa.
MANUFACTURERS OF
ANILINE COLORS, ANILINE SALT, ANILINE OIL,
CHLORIDE OF ZINC 98 TO 99%. OIL OF MYRBANE, SYNTHETIC ODORS

SULPHATE OF ALUMINA
Especially Made for Paper Manufacturers' Use.
MANUFACTURED BY
THE JARECKI CHEMICAL CO
SOLE SELLING AGENTS:
ISAAC WINKLER & BRO., - Cincinnati, O.

ARNOLD, HOFFMAN & CO., Inc.
IMPORTERS OF
INDIGO
Dyestuffs, Starches, Gums
PROVIDENCE, NEW YORK, BOSTON, PHILADELPHIA.

—THE—
German Kali Works
HAVE APPOINTED
H. J. BAKER & BROTHER, 100 William Street,
HELLER, HIRSH & CO., 62 William Street,
PETERS, WHITE & CO., 47 Cedar Street,
HAMILTON H. SALMON & CO., 88 Wall Street,
PAUL WEIDINGER & SON, 76 Pine Street,
NEW YORK
JAS. BONDAY, JR., & CO. —AND— HY. LA ITS & CO.
BALTIMORE
MEYER, WILSON & CO., San Francisco, Cal.
Their SOLE AGENTS in the United States and Canada
FOR THE SALE OF
Muriate of Potash, Kainit,
Sulphate of Potash, Sylvinit,
Double Manure Salt, Kieserit,
And other Potash Manure Salts.

KUTTROFF PICKHARDT & CO.
IMPORTERS OF
DYESTUFFS CHEMICALS AND COLORS
Sole Importers of the Products Manufactured by
Badische Anilin and Soda Fabrik
Ludwigshafen o/Rh., Germany
Branch Offices:
BOSTON, ... 153 Milk St.
PROVIDENCE, . 80 So. Water St.
PHILADELPHIA, 207 Chestnut St.
CHICAGO, . . 207 Michigan St.
SAN FRANCISCO, 215 Sacramento St.
No. 128 Duane Street
NEW YORK

NITRO BENZOL TOLUOL

W. C. BARNES & CO., Ltd., London, Manufacturers.

Sole Selling Agents,

The Selling Company,

186 Front Street, New York City.

"MONTSERRAT" LIME FRUIT JUICE

THE STANDARD BY ANALYSIS

We are the headquarters for Lime Juice in bulk. Crude or Clarified. Quotations F.O.B. any country.

EVANS AND SONS, LIM., - - 133 William St., New York,
Montreal and Toronto, Can.
EVANS SONS, LESCHER & WEBB, LIM., Liverpool and London, Eng.

AQUALITE

THE LATEST AND BEST

COLD WATER PAINT

For Outside and Inside Work. All the advantages of others, many features exclusively its own. We also manufacture *MURALTINT* and *HYGIENE* in White and Colors for Inside work: and *WHITE ROSE*, in White only for Inside work.

FOR SAMPLES, PRICES AND LITERATURE GIVING FULL INFORMATION, ADDRESS **COLUMBIA REFINING CO., *Sole Manufacturers,* 32 Broadway, New York**

SELLING AGENTS— UNDERHAY OIL CO., 275 Franklin St., BOSTON, Mass. E. F. HOUGHTON & CO., 240 to 250 W. Somerset St., PHILADELPHIA, Pa. JEWELL BELTING CO., Mgrs., Chicago Branch of E. F. Houghton & Co., 175-177 Lake St., CHICAGO. WHITTIER-COBURN CO., 18-20-22 Fremont St., SAN FRANCISCO, Cal.

Specialties for the Varnish Trade.

AMYL ACETATE, REFINED FUSEL OIL, and SOLUBLE COTTON.

MAAS & WALDSTEIN,

MANUFACTURING CHEMISTS,

Established 1876. **107 Murray St., New York**

OLIVE OIL. COD LIVER OIL

Italian and Spanish. Norwegian and Newfoundland.

IMPORTERS

A. W. DODD & CO., - - - Gloucester, Mass.

MANJAK

The E. grades of this excellent Asphaltum (over 95% pure) gives a uniform JET BLACK LUSTRE and is well known to the Varnish and Asphaltum trades

MELCHIOR, ARMSTRONG & DESSAU, Sole Agents for U. S. A.

32 Broadway, New York.

S. WINTERBOURNE & CO.

Varnish Gums, China Wood Oil

LONDON, NEW ZEALAND and 94 Pine Street, NEW YORK.

WE are the largest manufacturers of graphite products in the world. We make every article which can be made from graphite for uses in the arts and manufactures. If you are interested in any graphite products, ask for Booklet 92-k.

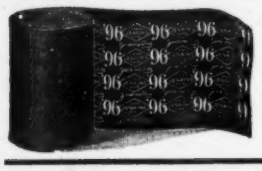
JOSEPH DIXON CRUCIBLE COMPANY, JERSEY CITY.

PATERSON, BOARDMAN & CO.,

Importers and General East India Merchants.

New Maritime Building, ... 8 to 10 Bridge Street, New York.

Plumbago, Kauri Gum, Manila Gum, Cocoanut Oil, Zanzibar Gum, Damar Gum, Etc.



JENKINS '96 PACKING

NONE BETTER as it makes joint instantly and will last as long as the metals which hold it. NONE CHEAPER as it weighs less than many others sold at equal price per pound. Remember, all genuine stamped with Trade-Mark.

JENKINS BROS., New York, Boston, Philadelphia, Chicago.

HEADQUARTERS FOR

BENZOL

ALL GRADES
of Coal Tar Naphtha and Benzol

Samples and prices on application.

CHEM. DEPT.
BARRETT MFG. CO.,
Philadelphia.

Bristol's Recording

Pressure Gauges, Recording Thermometers and Electrical Instruments

PAY FOR THEMSELVES.

THE BRISTOL CO.
WATERBURY, CONN.

TANITE

Emery,
Emery Wheels,
Emery Whetstones.
Grinding Machines,
Knife Sharpeners,
Knife Grinders.

The Tanite Co.,
STROUDSBURG, PA.

PERMANENT YELLOWS AND GREENS

FOR JAPAN, OIL, VARNISH, FRESCO.
FREE FROM LEAD
WM. F. SIEMON & CO., 92 William St., New York

Carbolic Acid - Naphthaline

White Crystals and Crude. Of All Forms.

PICRIC ACID for Explosives

Made by **CHEM. FABRIK LINDENHOF,** C. Weyl & Co., A. G., Mannheim, Germany
The White Tar Co., 101 NORTH MOORE ST., NEW YORK.
Sole Selling Agents for United States and Canada.

GEORGE A. ERKENBRACH

MANUFACTURING CHEMIST

115 Maiden Lane, ... New York

AQUA AMMONIA, all grades in drums, Carboys and Bottles.
NIT. AMMONIA, pure and coml.
BISULPH. CARBON
SOLUBLE COTTON
SULPHURIC ETHER, 1880 and 1890
CONC. NITROUS ETHER, 1 to 21
HOFFMAN'S ANODYNE
ACETONE
CYANIDE POTASH, C. P. and Fused
NITRATE THORIUM and full line of MANTLE CHEMICALS.

THURSTON & BRAIDICH, IMPORTERS, NEW YORK.

Gums Arabic, Senegal, Tragacanth,
Vanilla and Tonka Beans, Insect Powder,
Cocoa Butter, . Nutgalls, Opium.

PHENOM

VARNISH AND PAINT REMOVER . . . . .

A time, labor and Money Saver. Especially recommended for removing old paints varnish, enamel, &c., from floors, furniture, front doors and store fronts. Harmless to hands. The best paint remover on the market.

JOHN LUCAS & CO.
PHILADELPHIA. NEW YORK. CHICAGO.

ROTTEN STONE

R. J. WADDELL & CO.

52 Beekman Street, NEW YORK

IMPORTERS and GRINDERS

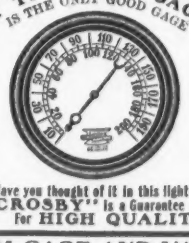
Pure Ground and Bolted English Rotten Stone
Selected Lump Rotten Stone

A FEW OF OUR STEAM SPECIALTIES

THE SPRING-SEAT GLOBE AND ANGLE VALVES

ALL PARTS RENEWABLE WITHOUT REMOVAL FROM THE PIPING

SAVES TIME and MONEY TRY THEM



Have you thought of it in this light? "CROSBY" is a Guarantee for HIGH QUALITY

We Do Not Boast

THE CROSBY "INSPECTOR" SAFETY VALVE

Has No Equal For { EFFICIENCY SAFETY DURABILITY

OPENS QUICKLY CLOSES QUICKLY With Least LOSS OF STEAM

CROSBY STEAM GAGE AND VALVE COMPANY
BOSTON NEW YORK CHICAGO LONDON

NOTICE We are prepared to *GUARANTEE* our *new improved*

INDELIBLO COLD WATER PAINT

to be ***MORE THOROUGHLY WEATHERPROOF*** than any Cold Water Paint heretofore made, and that it will last on the outside of a building at least ***twice as long as any*** competitive so-called weatherproof Cold Water Paint. Don't you want to handle the best paint if it does not cost you more? Full particulars upon application,

Address THE MURALO CO., New Brighton, Borough of Richmond, N. Y., U. S. A.

BRANCH OFFICES— 40 Dearborn Street, Chicago, Ills. Dunbar's Wharf, Narrow Street, Limehouse, London, E., England.